

If you plan to submit a bid directly to the Department of Transportation

PREQUALIFICATION

Any contractor who desires to become pre-qualified to bid on work advertised by IDOT must submit the properly completed pre-qualification forms to the Bureau of Construction no later than 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of letting.

REQUESTS FOR AUTHORIZATION TO BID

Contractors downloading and/or ordering CD-ROM's and are wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) and the ORIGINAL, signed and notarized, "Affidavit of Availability" (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date.

WHO CAN BID ?

Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID? When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a **Proposal Denial and/or Authorization Form**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Proposal Denial and/or Authorization Form** will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID: Firms that have not received an authorization form within a reasonable time of complete and correct original document submittal should contact the department as to status. This is critical in the week before the letting. These documents must be received three days before the letting date. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

ADDENDA AND REVISIONS: It is the contractor's responsibility to determine which, if any, addenda or revisions pertain to any project they may be bidding. Failure to incorporate all relevant addenda or revisions may cause the bid to be declared unacceptable.

Each addendum will be placed with the contract number. Addenda and revisions will also be placed on the Addendum/Revision Checklist and each subscription service subscriber will be notified by e-mail of each addendum and revision issued.

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that bidder check IDOT's website <http://www.dot.il.gov/desenv/delett.html> before submitting final bid information.

IDOT is not responsible for any e-mail related failures.

Addenda Questions may be directed to the Contracts Office at (217)782-7806 or D&Econtracts@dot.il.gov

Technical Questions about downloading these files may be directed to Tim Garman (217)524-1642 or garmantr@dot.il.gov.

WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

ABOUT SUBMITTING BIDS: It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
Prequalification and/or Authorization to Bid	(217)782-3413
Preparation and submittal of bids	(217)782-7806
Mailing of plans and proposals	(217)782-7806
Electronic plans and proposals	(217)524-1642

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

Planholders should verify that they have received and incorporated the addendum and/or revision prior to submitting their bid. Failure by the bidder to include an addendum could result in a bid being rejected as irregular.

236

RETURN WITH BID

Proposal Submitted By
Name
Address
City

Letting June 15, 2007

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL
(See instructions inside front cover)

NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.

(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

Notice To Bidders, Specifications, Proposal, Contract and Contract Bond



**Illinois Department
of Transportation**

Springfield, Illinois 62764

**Contract No. 83919
MCHENRY County
Section 06-00030-00-FP (Huntley)
Route FAU 3869 (Haligus Road)
Project M-8003(641)
District 1 Construction Funds**

PLEASE MARK THE APPROPRIATE BOX BELOW:

- A Bid Bond is included.
- A Cashier's Check or a Certified Check is included

Prepared by

F

Checked by

(Printed by authority of the State of Illinois)

INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond required for Prime Contractors to submit a bid after written **Authorization to Bid** has been issued by IDOT's Central Bureau of Construction.

WHO CAN BID?: Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction. To request authorization, a potential bidder must complete and submit Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Proposal Forms and Plans" he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a **Proposal Denial and/or Authorization Form**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Proposal Denial and/or Authorization Form** will indicate the reason for denial. If a contractor has requested to bid but has not received a **Proposal Denial and/or Authorization Form**, they should contact the Central Bureau of Construction in advance of the letting date.

WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

ABOUT SUBMITTING BIDS: It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
Prequalification and/or Authorization to Bid	217/782-3413
Preparation and submittal of bids	217/782-7806
Mailing of CD-ROMS	217/782-7806

RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

Taxpayer Identification Number (Mandatory) _____

for the improvement identified and advertised for bids in the Invitation for Bids as:

**Contract No. 83919
MCHENRY County
Section 06-0030-00-FP (Huntley)
Project M-8003(641)
Route FAU 3869 (Haligus Road)
District 1 Construction Funds**

New roadway construction and existing roadway widening project to include earth excavation and pavement removal, construction of storm and drainage structures, HMA base, binder and surface courses, temporary traffic signal installation and all other work to complete the project from Algonquin Road to Reed Road in the Village of Huntley.

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents shall govern performance and payments.

RETURN WITH BID

3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this proposal he/she waives all right to plead any misunderstanding regarding the same.

4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract.

5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

<u>Amount of Bid</u>		<u>Proposal Guaranty</u>		<u>Amount of Bid</u>		<u>Proposal Guaranty</u>	
Up to	\$5,000	\$150		\$2,000,000	to	\$3,000,000	\$100,000
\$5,000	to \$10,000	\$300		\$3,000,000	to	\$5,000,000	\$150,000
\$10,000	to \$50,000	\$1,000		\$5,000,000	to	\$7,500,000	\$250,000
\$50,000	to \$100,000	\$3,000		\$7,500,000	to	\$10,000,000	\$400,000
\$100,000	to \$150,000	\$5,000		\$10,000,000	to	\$15,000,000	\$500,000
\$150,000	to \$250,000	\$7,500		\$15,000,000	to	\$20,000,000	\$600,000
\$250,000	to \$500,000	\$12,500		\$20,000,000	to	\$25,000,000	\$700,000
\$500,000	to \$1,000,000	\$25,000		\$25,000,000	to	\$30,000,000	\$800,000
\$1,000,000	to \$1,500,000	\$50,000		\$30,000,000	to	\$35,000,000	\$900,000
\$1,500,000	to \$2,000,000	\$75,000		over		\$35,000,000	\$1,000,000

Bank cashier's checks or properly certified checks accompanying proposals shall be made payable to the Treasurer, State of Illinois, when the state is awarding authority; the county treasurer, when a county is the awarding authority; or the city, village, or town treasurer, when a city, village, or town is the awarding authority.

If a combination bid is submitted, the proposal guaranties which accompany the individual proposals making up the combination will be considered as also covering the combination bid.

The amount of the proposal guaranty check is _____ \$(_____). If this proposal is accepted and the undersigned shall fail to execute a contract bond as required herein, it is hereby agreed that the amount of the proposal guaranty shall become the property of the State of Illinois, and shall be considered as payment of damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond shall become void or the proposal guaranty check shall be returned to the undersigned.

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual proposal. If the guaranty check is placed in another proposal, state below where it may be found.

The proposal guaranty check will be found in the proposal for:

Item _____

Section No. _____

County _____

Mark the proposal cover sheet as to the type of proposal guaranty submitted.

BD 354 (Rev. 11/2001)

RETURN WITH BID

6. **COMBINATION BIDS.** The undersigned further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual proposal comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.

When a combination bid is submitted, the schedule below must be completed in each proposal comprising the combination.

If alternate bids are submitted for one or more of the sections comprising the combination, a combination bid must be submitted for each alternate.

Schedule of Combination Bids

Combination No.	Sections Included in Combination	Combination Bid	
		Dollars	Cents

7. **SCHEDULE OF PRICES.** The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
8. **CERTIFICATE OF AUTHORITY.** The undersigned bidder, if a business organized under the laws of another State, assures the Department that it will furnish a copy of its certificate of authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish the certificate within the time provided for execution of an awarded contract may be cause for cancellation of the award and forfeiture of the proposal guaranty to the State.

STATE JOB # - C-91-350-06
 PPS NBR - 1-20334-0000

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919
 ECMS002 DTGECM03 ECMR003 PAGE 1
 RUN DATE - 05/11/07
 RUN TIME - 213404

COUNTY NAME	CODE	DIST	SECTION NUMBER	PROJECT NUMBER	ROUTE
MCHENRY	111	01	06-00030-00-FP (HUNTLEY)	M-8003/641/000	FAU 3869

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS	CENTS	TOTAL PRICE DOLLARS	CTS
XX004801	BIT BIKE PATH REM	SQ YD	231.000 X				
XX005107	CONN EX W MN NP 12	EACH	1.000 X				
XX005723	VIDEO DET SY COMP INT	EACH	1.000 X				
XX005770	STR TO BE ABANDONED	EACH	1.000 X				
XX006963	TS WOOD POLE 45 CL 5	EACH	4.000 X				
XX006964	ELCBL AS COMM 16 5.5	FOOT	763.000 X				
X0322256	TEMP INFO SIGNING	SQ FT	78.000 X				
X0323426	SED CONT DR ST INL CL	EACH	42.000 X				
X8050010	SERV INSTALL GRND MT	EACH	1.000 X				
X8730350	ELCBL AS 20 3C TW SH	FOOT	346.000 X				
Z0001050	AGG SUBGRADE 12	SQ YD	15,578.000 X				
Z0076600	TRAINEES	hour	500.000 X	0.80		400.00	
20101100	TREE TRUNK PROTECTION	EACH	3.000 X				
20101200	TREE ROOT PRUNING	EACH	3.000 X				
20200100	EARTH EXCAVATION	CU YD	3,056.000 X				

FAU 3869
 06-00030-00-FP (HUNTLEY)
 MCHENRY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919

ECMS002 DTGECM03 ECMR003 PAGE 2
 RUN DATE - 05/11/07
 RUN TIME - 213404

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
20201200	REM & DISP UNS MATL	CU YD	11,161.000	=			
20400800	FURNISHED EXCAV	CU YD	228.000	=			
20700420	POROUS GRAN EMB SUBGR	CU YD	785.000	=			
20800150	TRENCH BACKFILL	CU YD	98.000	=			
21001000	GEOTECH FAB F/GR STAB	SQ YD	2,500.000	=			
21101615	TOPSOIL F & P 4	SQ YD	14,423.000	=			
21300010	EXPLOR TRENCH SPL	FOOT	400.000	=			
25000110	SEEDING CL 1A	ACRE	2.700	=			
25000300	SEEDING CL 3	ACRE	0.300	=			
25000400	NITROGEN FERT NUTR	POUND	270.000	=			
25000500	PHOSPHORUS FERT NUTR	POUND	270.000	=			
25000600	POTASSIUM FERT NUTR	POUND	270.000	=			
25100630	EROSION CONTR BLANKET	SQ YD	14,423.000	=			
25200200	SUPPLE WATERING	UNIT	220.000	=			
28000250	TEMP EROS CONTR SEED	POUND	300.000	=			

FAU 3869
 06-00030-00-FP (HUNTLEY)
 MCHENRY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919

ECMS002 DTGECM03 ECMR003 PAGE 3
 RUN DATE - 05/11/07
 RUN TIME - 213404

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
28000300	TEMP DITCH CHECKS	EACH	69.000	=			
28000400	PERIMETER EROS BAR	FOOT	2,458.000	=			
28000510	INLET FILTERS	EACH	14.000	=			
28100105	STONE RIPRAP CL A3	SQ YD	28.000	=			
31101400	SUB GRAN MAT B 6	SQ YD	3,093.000	=			
35501308	HMA BASE CSE 6	SQ YD	1,577.000	=			
40600100	BIT MATLS PR CT	GALLON	11,739.000	=			
40600300	AGG PR CT	TON	38.000	=			
40600982	HMA SURF REM BUTT JT	SQ YD	83.000	=			
40603310	HMA SC "C" N50	TON	520.000	=			
40603335	HMA SC "D" N50	TON	788.000	=			
40701841	HMA PAVT FD 8	SQ YD	12,259.000	=			
42001300	PROTECTIVE COAT	SQ YD	1,201.000	=			
42400430	PC CONC SIDEWALK 5 SP	SQ FT	1,045.000	=			
42400800	DETECTABLE WARNINGS	SQ FT	213.000	=			

FAU 3869
 06-00030-00-FP (HUNTLEY)
 MCHENRY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919

ECMS002 DTGECM03 ECMR003 PAGE 4
 RUN DATE - 05/11/07
 RUN TIME - 213404

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS	CENTS	TOTAL PRICE DOLLARS	CTS
44000155	HMA SURF REM 1 1/2	SQ YD	694.000	=			
44000196	HMA SURF REM SPL	SQ YD	4,959.000	=			
44000500	COMB CURB GUTTER REM	FOOT	201.000	=			
44000600	SIDEWALK REM	SQ FT	302.000	=			
44004510	PCC SHOULDER REMOVAL	SQ YD	57.000	=			
44201745	CL D PATCH T3 8	SQ YD	250.000	=			
44300100	AREA REF CR CON TREAT	SQ YD	6,504.000	=			
48101500	AGGREGATE SHLDS B 6	SQ YD	604.000	=			
48300300	PCC SHOULDERS 8	SQ YD	802.000	=			
54213660	PRC FLAR END SEC 15	EACH	2.000	=			
54213663	PRC FLAR END SEC 18	EACH	1.000	=			
54213672	PRC FLAR END SEC 27	EACH	3.000	=			
54247140	GRATING-C FL END S 27	EACH	1.000	=			
550A0070	STORM SEW CL A 1 15	FOOT	477.000	=			
550A0090	STORM SEW CL A 1 18	FOOT	72.000	=			

FAU 3869
 06-00030-00-FP (HUNTLEY)
 MCHENRY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919

ECMS002 DTGECM03 ECMR003 PAGE 5
 RUN DATE - 05/11/07
 RUN TIME - 213404

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE
				DOLLARS	CENTS	
550A0130	STORM SEW CL A 1 27	FOOT	183.000 X	=		
550A0380	STORM SEW CL A 2 18	FOOT	13.000 X	=		
550A0420	STORM SEW CL A 2 27	FOOT	28.000 X	=		
55034400	SS 1 RCEP S34 R22	FOOT	72.000 X	=		
56103300	D I WATER MAIN 12	FOOT	90.000 X	=		
56105200	WATER VALVES 12	EACH	1.000 X	=		
56106600	ADJ WATER MAIN 12	FOOT	50.000 X	=		
56400100	FIRE HYDNTS TO BE MVD	EACH	2.000 X	=		
56400300	FIRE HYDNTS TO BE ADJ	EACH	1.000 X	=		
60100905	PIPE DRAINS 4	FOOT	100.000 X	=		
60100935	PIPE DRAINS 10	FOOT	100.000 X	=		
60109510	P UNDR FAB LINE TR 4	FOOT	349.000 X	=		
60203905	CB TA 5 DIA T1F CL	EACH	2.000 X	=		
60218400	MAN TA 4 DIA T1F CL	EACH	3.000 X	=		
60221100	MAN TA 5 DIA T1F CL	EACH	3.000 X	=		

FAU 3869
 06-00030-00-FP (HUNTLEY)
 MCHENRY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919

ECMS002 DTGECM03 ECMR003 PAGE 6
 RUN DATE - 05/11/07
 RUN TIME - 213404

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE
				DOLLARS	CENTS	
60236200	INLETS TA T8G	EACH	8.000 X	=		
60248900	VV TA 5 DIA T1F CL	EACH	1.000 X	=		
60255600	MAN ADJUST SPL	EACH	2.000 X	=		
60257900	MAN RECONST	EACH	7.000 X	=		
60258000	MAN RECONST SPL	EACH	1.000 X	=		
60265700	VV ADJUST	EACH	1.000 X	=		
60266100	VV RECONST	EACH	3.000 X	=		
60300310	FR & LIDS ADJUST SPL	EACH	1.000 X	=		
60500405	FILL VALVE VLTS	EACH	2.000 X	=		
60600095	CLASS SI CONC OUTLET	CU YD	2.300 X	=		
60603800	COMB CC&G TB6.12	FOOT	827.000 X	=		
60605000	COMB CC&G TB6.24	FOOT	132.000 X	=		
66700095	PERM SURV MKRS	EACH	1.000 X	=		
67000400	ENGR FIELD OFFICE A	CAL MO	6.000 X	=		
67100100	MOBILIZATION	L SUM	1.000 X	=		

FAU 3869
 06-00030-00-FP (HUNTLEY)
 MCHENRY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919

ECMS002 DTGECM03 ECMR003 PAGE 7
 RUN DATE - 05/11/07
 RUN TIME - 213404

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE
				DOLLARS	CENTS	
70101800	TRAF CONT & PROT SPL	L SUM	1.000	X	=	
70300100	SHORT-TERM PAVT MKING	FOOT	913.000	X	=	
70300610	TEMP PT PAVT MK L&S	SQ FT	381.000	X	=	
70300625	TEMP PT PVT M LINE 4	FOOT	24,345.000	X	=	
70300635	TEMP PT PVT M LINE 6	FOOT	2,589.000	X	=	
70300645	TEMP PT PVT M LINE 12	FOOT	1,242.000	X	=	
70300660	TEMP PT PVT M LINE 24	FOOT	178.000	X	=	
72000100	SIGN PANEL T1	SQ FT	84.000	X	=	
72000105	SIGN PANEL T1 SPL	SQ FT	32.000	X	=	
72000200	SIGN PANEL T2	SQ FT	10.000	X	=	
72400100	REMOV SIN PAN ASSY TA	EACH	10.000	X	=	
72400500	RELOC SIN PAN ASSY TA	EACH	5.000	X	=	
72800100	TELES STL SIN SUPPORT	FOOT	225.000	X	=	
78000100	THPL PVT MK LTR & SYM	SQ FT	381.000	X	=	
78000200	THPL PVT MK LINE 4	FOOT	24,345.000	X	=	

FAU 3869
 06-00030-00-FP (HUNTLEY)
 MCHENRY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919

ECMS002 DTGECM03 ECMR003 PAGE 8
 RUN DATE - 05/11/07
 RUN TIME - 213404

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	CTS
				DOLLARS	CENTS		
78000400	THPL PVT MK LINE 6	FOOT	2,589.000	X	=		
78000600	THPL PVT MK LINE 12	FOOT	1,242.000	X	=		
78000650	THPL PVT MK LINE 24	FOOT	178.000	X	=		
78100100	RAISED REFL PAVT MKR	EACH	27.000	X	=		
78300100	PAVT MARKING REMOVAL	SQ FT	1,586.000	X	=		
78300200	RAISED REF PVT MK REM	EACH	26.000	X	=		
81018500	CON P 2 GALVS	FOOT	15.000	X	=		
84400105	RELOC EX LT UNIT	EACH	1.000	X	=		
85700205	FAC T4 CAB SPL	EACH	1.000	X	=		
87200400	SPAN WIRE	FOOT	618.000	X	=		
87200500	TETHER WIRE	FOOT	589.000	X	=		
87301805	ELCBL C SERV 6 2C	FOOT	34.000	X	=		
87302225	ELCBL AS SIGL 14 3C	FOOT	346.000	X	=		
87302245	ELCBL AS SIGL 14 5C	FOOT	985.000	X	=		
87302255	ELCBL AS SIGL 14 7C	FOOT	1,970.000	X	=		

FAU 3869
 06-00030-00-FP (HUNTLEY)
 MCHENRY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 83919

ECMS002 DTGECM03 ECMR003 PAGE 9
 RUN DATE - 05/11/07
 RUN TIME - 213404

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
88000180	SH 1F 3S SWM	EACH	4.000				
88000300	SH 1F 5S SWM	EACH	8.000				
88700200	LIGHT DETECTOR	EACH	2.000				
88700300	LIGHT DETECTOR AMP	EACH	1.000				
				TOTAL \$			

NOTE:

1. EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.
2. THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS A DISCREPANCY BETWEEN THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY.
3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
4. A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

RETURN WITH BID

STATE REQUIRED ETHICAL STANDARDS GOVERNING CONTRACT PROCUREMENT: ASSURANCES, CERTIFICATIONS AND DISCLOSURES

I. GENERAL

A. Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

B. In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.

C. In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for termination of the contract and the suspension or debarment of the bidder.

II. ASSURANCES

A. The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

B. Felons

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any state agency from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-10.

C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

(a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.

(b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

The current salary of the Governor is \$150,700.00. Sixty percent of the salary is \$90,420.00.

RETURN WITH BID

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

(a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

E. Inducements

1. The Illinois Procurement Code provides:

Section 50-25. Inducement. Any person who offers or pays any money or other valuable thing to any person to induce him or her not to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-25, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, associate procurement officers, State purchasing officers, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-30, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the chief procurement officer.

2. The bidder assures the Department that it has not failed to report any relevant facts concerning the practices addressed in Section 50-40 which may involve the contract for which the bid is submitted.

H. Confidentiality

1. The Illinois Procurement Code provides:

Section 50-45. Confidentiality. Any chief procurement officer, State purchasing officer, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

2. The bidder assures the Department that it has no knowledge of any fact relevant to the practices addressed in Section 50-45 which may involve the contract for which the bid is submitted.

RETURN WITH BID

I. Insider Information

1. The Illinois Procurement Act provides:

Section 50-50. Insider information. It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

2. The bidder assures the Department that it has no knowledge of any facts relevant to the practices addressed in Section 50-50 which may involve the contract for which the bid is submitted.

III. CERTIFICATIONS

A. The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The bidder certifies that it is not barred from being awarded a contract under Section 50.5.

C. Educational Loan

1. Section 3 of the Educational Loan Default Act provides:

§ 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.

2. The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

D. Bid-Rigging/Bid Rotating

1. Section 33E-11 of the Criminal Code of 1961 provides:

§ 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.

RETURN WITH BID

(b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

2. The bidder certifies that it is not barred from contracting with the Department by reason of a violation of either Section 33E-3 or Section 33E-4.

E. International Anti-Boycott

1. Section 5 of the International Anti-Boycott Certification Act provides:

§ 5. State contracts. Every contract entered into by the State of Illinois for the manufacture, furnishing, or purchasing of supplies, material, or equipment or for the furnishing of work, labor, or services, in an amount exceeding the threshold for small purchases according to the purchasing laws of this State or \$10,000.00, whichever is less, shall contain certification, as a material condition of the contract, by which the contractor agrees that neither the contractor nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act.

2. The bidder makes the certification set forth in Section 5 of the Act.

F. Drug Free Workplace

1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.

(c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.

(d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.

(e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.

(f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

G. Debt Delinquency

1. The Illinois Procurement Code provides:

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

H. Sarbanes-Oxley Act of 2002

1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

I. Addenda

The contractor or bidder certifies that all relevant addenda have been incorporated in to this contract. Failure to do so may cause the bid to be declared unacceptable.

J. Section 42 of the Environmental Protection Act

The contractor certifies in accordance with 30 ILCS 500/50-12 that the bidder or contractor is not barred from being awarded a contract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The contractor acknowledges that the contracting agency may declare the contract void if this certification is false.

K. Apprenticeship and Training Certification (Does not apply to federal aid projects)

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. **The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project as reported on the Construction Employee Workforce Projection (Form BC-1256) and returned with the bid is accounted for and listed.**

NA - FEDERAL

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

L. Executive Order Number 1 (2007) Regarding Lobbying on Government Procurements

The bidder hereby warrants and certifies that they have complied and will comply with the requirements set forth in this Order. The requirements of this warrant and certification are a material part of the contract, and the contractor shall require this warrant and certification provision to be included in all approved subcontracts.

TO BE RETURNED WITH BID

IV. DISCLOSURES

A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, and the surety providing the performance bond shall be responsible for completion of the contract.

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$10,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

In addition, all disclosures shall indicate any other current or pending contracts, proposals, leases, or other ongoing procurement relationships the bidding entity has with any other unit of state government and shall clearly identify the unit and the contract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid or incorporated by reference.**

C. Disclosure Form Instructions

Form A: For bidders that have previously submitted the information requested in Form A

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may sign the following certification statement indicating that the information previously submitted by the bidder is, as of the date of signature, current and accurate. The Certification must be signed and dated by a person who is authorized to execute contracts for the bidding company. Before signing this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder signs the Certification, the Bidder should proceed to Form B instructions.

CERTIFICATION STATEMENT

I have determined that the Form A disclosure information previously submitted is current and accurate, and all forms are hereby incorporated by reference in this bid. Any necessary additional forms or amendments to previously submitted forms are attached to this bid.

(Bidding Company)

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative

Date

Form A: For bidders who have NOT previously submitted the information requested in Form A

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$90,420.00? YES ___ NO ___
3. Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES ___ NO ___
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$90,420.00? YES ___ NO ___
(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable.** The person signing can be, but does not have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the NOT APPLICABLE STATEMENT on page 2 of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

Form B: Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the bidding entity. It must be signed by an individual who is authorized to execute contracts for the bidding entity. *Note: Signing the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder may be considered nonresponsive and the bid will not be accepted.*

The Bidder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the signature box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:

Option I: If the bidder did not submit an Affidavit of Availability to obtain authorization to bid, the bidder must list all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.

Option II: If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type "See Affidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the Affidavit of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.

D. Bidders Submitting More Than One Bid

Bidders submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. Please indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms by reference.

- The bid submitted for letting item _____ contains the Form A disclosures or Certification Statement and the Form B disclosures. The following letting items incorporate the said forms by reference:

RETURN WITH BID/OFFER

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**Form A
Financial Information &
Potential Conflicts of Interest
Disclosure**

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$10,000, and for all open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than \$90,420.00 (60% of the Governor's salary as of 7/1/01). **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

FOR INDIVIDUAL (type or print information)

NAME: _____

ADDRESS _____

Type of ownership/distributable income share:

stock _____ sole proprietorship _____ Partnership _____ other: (explain on separate sheet):
% or \$ value of ownership/distributable income share: _____

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services.

Yes ___ No ___

If your answer is yes, please answer each of the following questions.

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes ___ No ___
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name the State agency for which you are employed and your annual salary. _____

RETURN WITH BID/OFFER

- 3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No ___

- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes ___ No ___

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

Yes ___ No ___

If your answer is yes, please answer each of the following questions.

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois Toll Highway Authority? Yes ___ No ___

- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____

3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the salary of the Governor as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No ___

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes ___ No ___

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes ___ No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ___ No ___

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ___ No ___

RETURN WITH BID/OFFER

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page.

Completed by: _____
Name of Authorized Representative (type or print)

Completed by: _____
Title of Authorized Representative (type or print)

Completed by: _____ Date _____
Signature of Individual or Authorized Representative

NOT APPLICABLE STATEMENT

I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative Date _____

RETURN WITH BID/OFFER

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**Form B
Other Contracts &
Procurement Related Information
Disclosure**

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$10,000, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No ___

If "No" is checked, the bidder only needs to complete the signature box on the bottom of this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE SIGNED

Name of Authorized Representative (type or print)	

Title of Authorized Representative (type or print)	
_____	_____
Signature of Authorized Representative	Date

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Department of Human Rights' Rules and Regulations are applicable to bidders on all construction contracts advertised by the Illinois Department of Transportation:

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

- (a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.
- (b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.

RETURN WITH BID

**Contract No. 83919
MCHENRY County
Section 06-00030-00-FP (Huntley)
Project M-8003(641)
Route FAU 3869 (Haligus Road)
District 1 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

- B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

The undersigned bidder projects that: (number) _____ new hires would be recruited from the area in which the contract project is located; and/or (number) _____ new hires would be recruited from the area in which the bidder's principal office or base of operation is located.

- C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.

The undersigned bidder estimates that (number) _____ persons will be directly employed by the prime contractor and that (number) _____ persons will be employed by subcontractors.

PART III. AFFIRMATIVE ACTION PLAN

- A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under **PART II** is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the **Department of Human Rights**.
- B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company _____ Telephone Number _____

Address _____

NOTICE REGARDING SIGNATURE

The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required.

Signature: _____ Title: _____ Date: _____

Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.

Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.

Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.

Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

RETURN WITH BID

ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), all bidders make the following certifications.

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. **CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:**
1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES _____ NO _____
 2. If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES _____ NO _____

RETURN WITH BID

**Contract No. 83919
MCHENRY County
Section 06-00030-00-FP (Huntley)
Project M-8003(641)
Route FAU 3869 (Halgus Road)
District 1 Construction Funds**

PROPOSAL SIGNATURE SHEET

The undersigned bidder hereby makes and submits this bid on the subject Proposal, thereby assuring the Department that all requirements of the Invitation for Bids and rules of the Department have been met, that there is no misunderstanding of the requirements of paragraph 3 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

(IF AN INDIVIDUAL) Firm Name _____
Signature of Owner _____
Business Address _____

(IF A CO-PARTNERSHIP) Firm Name _____
By _____
Business Address _____
Name and Address of All Members of the Firm: _____

(IF A CORPORATION) Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____

(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW) Attest _____
Signature _____
Business Address _____

(IF A JOINT VENTURE) Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____

Attest _____
Signature _____
Business Address _____

If more than two parties are in the joint venture, please attach an additional signature sheet.

RETURN WITH BID



Division of Highways
Proposal Bid Bond
(Effective November 1, 1992)

Item No.
Letting Date

KNOW ALL MEN BY THESE PRESENTS, That We

as PRINCIPAL, and

as SURETY, are held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in Article 102.09 of the "Standard Specifications for Road and Bridge Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, That Whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS, acting through the Department of Transportation, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents, submit a DBE Utilization Plan that is accepted and approved by the Department; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to make the required DBE submission or to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this day of A.D.,

PRINCIPAL SURETY
(Company Name)
By: (Signature & Title) By: (Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,
COUNTY OF

I, a Notary Public in and for said County, do hereby certify that and

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this day of, A.D.

My commission expires Notary Public

In lieu of completing the above section of the Proposal Bid Form, the Principal may file an Electronic Bid Bond. By signing below the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

Electronic Bid Bond ID# Company/Bidder Name Signature and Title

PROPOSAL ENVELOPE



PROPOSALS

for construction work advertised for bids by the Illinois Department of Transportation

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

Bidders should use an IDOT proposal envelope or affix this form to the front of a 10" x 13" envelope for the submittal of bids. If proposals are mailed, they should be enclosed in a second or outer envelope addressed to:

Engineer of Design and Environment - Room 326
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

NOTICE

Individual bids, including Bid Bond and/or supplemental information if required, should be securely stapled.

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.

**Contract No. 83919
MCHENRY County
Section 06-00030-00-FP (Huntley)
Project M-8003(641)
Route FAU 3869 (Haligus Road)
District 1 Construction Funds**



Illinois Department of Transportation



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., June 15, 2007. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 83919
MCHENRY County
Section 06-00030-00-FP (Huntley)
Project M-8003(641)
Route FAU 3869 (Halgus Road)
District 1 Construction Funds**

New roadway construction and existing roadway widening project to include earth excavation and pavement removal, construction of storm and drainage structures, HMA base, binder and surface courses, temporary traffic signal installation and all other work to complete the project from Algonquin Road to Reed Road in the Village of Huntley.

- 3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Milton R. Sees, Acting Secretary

BD 351 (Rev. 01/2003)

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2007

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

<u>CHECK SHEET #</u>	<u>PAGE NO.</u>
1 X Additional State Requirements For Federal-Aid Construction Contracts (Eff. 2-1-69) (Rev. 1-1-07)	1
2 X Subletting of Contracts (Federal-Aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	3
3 X EEO (Eff. 7-21-78) (Rev. 11-18-80).....	4
4 Specific Equal Employment Opportunity Responsibilities Non Federal-Aid Contracts (Eff. 3-20-69) (Rev. 1-1-94).....	14
5 Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 1-1-07).....	19
6 Reserved	24
7 X National Pollutant Discharge Elimination System Permit (Eff. 7-1-94) (Rev. 1-1-03).....	25
8 Haul Road Stream Crossings, Other Temporary Stream Crossings, and In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98)	26
9 Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-07)	27
10 Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-07).....	30
11 Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-07)	33
12 Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 1-1-07)	35
13 Hot-Mix Asphalt Surface Removal (Cold Milling) (Eff. 11-1-87) (Rev. 1-1-07).....	39
14 Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-07).....	41
15 PCC Partial Depth Hot-Mix Asphalt Patching (Eff. 1-1-98) (Rev. 1-1-07).....	42
16 Patching with Hot-Mix Asphalt Overlay Removal (Eff. 10-1-95) (Rev. 1-1-07).....	44
17 Polymer Concrete (Eff. 8-1-95) (Rev. 3-1-05).....	45
18 PVC Pipeliner (Eff. 4-1-04) (Rev. 1-1-07).....	47
19 X Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-07).....	48
20 Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-97)	49
21 Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-07)	53
22 Temporary Modular Glare Screen System (Eff. 1-1-00) (Rev. 1-1-07)	55
23 Temporary Portable Bridge Traffic Signals (Eff. 8-1-03) (Rev. 1-1-07).....	57
24 Work Zone Public Information Signs (Eff. 9-1-02) (Rev. 1-1-07)	59
25 Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	60
26 English Substitution of Metric Bolts (Eff. 7-1-96)	61
27 English Substitution of Metric Reinforcement Bars (Eff. 4-1-96) (Rev. 1-1-03).....	62
28 Calcium Chloride Accelerator for Portland Cement Concrete (Eff. 1-1-01).....	63
29 Quality Control of Concrete Mixtures at the Plant-Single A (Eff. 8-1-00) (Rev. 1-1-04)	64
30 Quality Control of Concrete Mixtures at the Plant-Double A (Eff. 8-1-00) (Rev. 1-1-04).....	70
31 X Quality Control/Quality Assurance of Concrete Mixtures (Eff. 4-1-92) (Rev. 1-1-07).....	78
LRS 1 Reserved	91
LRS 2 <input type="checkbox"/> Furnished Excavation (Eff. 1-1-99) (Rev. 1-1-07)	92
LRS 3 <input checked="" type="checkbox"/> Work Zone Traffic Control (Eff. 1-1-99) (Rev. 1-1-07).....	93
LRS 4 <input checked="" type="checkbox"/> Flaggers in Work Zones (Eff. 1-1-99) (Rev. 1-1-07).....	94
LRS 5 <input type="checkbox"/> Contract Claims (Eff. 1-1-02) (Rev. 1-1-07).....	95
LRS 6 <input type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals (Eff. 1-1-02).....	96
LRS 7 <input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals (Eff. 1-1-02) (Rev. 1-1-03).....	102
LRS 8 <input type="checkbox"/> Failure to Complete the Work on Time (Eff. 1-1-99)	108
LRS 9 <input type="checkbox"/> Bituminous Surface Treatments (Eff. 1-1-99)	109
LRS 10 <input type="checkbox"/> Reflective Sheeting Type C (Eff. 1-1-99) (Rev. 1-1-02)	110
LRS 11 <input type="checkbox"/> Employment Practices (Eff. 1-1-99)	111
LRS 12 <input type="checkbox"/> Wages of Employees on Public Works (Eff. 1-1-99) (Rev. 1-1-06).....	113
LRS 13 <input type="checkbox"/> Selection of Labor (Eff. 1-1-99)	114
LRS 14 <input type="checkbox"/> Paving Brick and Concrete Paver Pavements and Sidewalks (Eff. 1-1-04) (Rev. 1-1-07).....	115
LRS 15 <input type="checkbox"/> Partial Payments (Eff. 1-1-07)	118

INDEX OF SPECIAL PROVISIONS

TITLE	PAGE NO.
Location of Project	2
Description of Project	2
Completion Date	2
Cooperation with Adjacent Contracts	2
Maintenance of Roadways	3
Traffic Control Plan	3
Traffic Control and Protection (Special)	4
Temporary Information Signing	6
Keeping Roads Open to Traffic	6
Status of Utilities to be Adjusted	7
Removal of Miscellaneous Items	7
Concrete Breakers	7
Disposal of Surplus Material	8
Porous Granular Embankment, Subgrade	8
Trench Backfill	9
Exploration Trench, Special	9
Portland Cement Concrete Sidewalk 5 Inch, Special	10
Detectable Warnings	10
Hot-Mix Asphalt Surface Removal, Special	11
Portland Cement Concrete Shoulders 8"	11
Ductile Iron Water Main	11
Water Valves 12"	15
Adjusting Water Main	15
Fire Hydrant to be Moved	16
Fire Hydrant to be Adjusted	16
Pipe Drains	17
Pipe Underdrains, Fabric Lined Trench, 4"	17
Flat Slab Top	17
Manholes to be Adjusted (Special)	17
Manholes to be Reconstructed (Special)	18
Filling Valve Vaults	18
Permanent Survey Marker	18
Sign Panel (Special)	19
Ground Rod	20
Relocate Existing Lighting Unit	21
Aggregate Subgrade, 12"	21
Sediment Control, Drainage Structure Inlet Filter Cleaning	23
Bituminous Bike Path Removal	23
Connection to Existing Water Main (Non-Pressure) - 12"	23
Structure to be Abandoned	24
Storm Sewers	24
Traffic Signal Specifications	25
Storm Water Pollution Prevention Plan	66
Soils Report	80
Electric Cable Aerial Suspended, Communication, No. 16 5 1/2 Pair	102
Traffic Signal Wood Pole, 45 FT., Class 5	102

INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

<u>LR#</u>	<u>Title (Effective Date) (Revision Date)</u>	<u>Page #</u>
LR SD 12	"Slab Movement Detection Device" (Eff. 11/1/84) (Rev. 1/1/07).....	
LR SD 13	"Required Cold Milled Surface Texture" (Eff. 11/1/87) (Rev. 1/1/07).....	
LR SD 630	"Steel Plate Beam Guardrail" (Eff. 2/1/07). Developed to allow local agencies to continue to use 27" guardrail with 6 inch blockouts.	
LR SD 631	"Traffic Barrier Terminals" (Rev. 2/1/07). Developed to keep Traffic Barrier Terminals Type 1, 2 & 5A as an option for local agencies to use with 27" guardrail with 6 inch blockouts.	
LR SD 633	"Remove and Reerect Steel Plate Beam Guardrail" (Eff. 2/1/07). Developed to allow local agencies to replace 27" guardrail with 6 inch blockouts.	
LR 102	"Protests on Local Lettings" (Eff. 1/1/07). Developed to allow local agencies to adopt the department's interested party protest procedures outlined in Title 44 of the IL Administrative Code.	
LR 105	X "Cooperation with Utilities" (Eff 1/1/99) (Rev 1/1/07). Formerly issued as LRS 1 and was reissued as an LR Contract Special Provision based on industry concerns discussed at the Joint Coop.	103
LR 107-1	"Nationwide Permit No. 14" (Eff. 2/1/04) (Rev. 3/1/05). Developed to outline the necessary requirements to comply with No. 14 permits.	
LR 107-2	"Railroad Protective Liability Insurance for Local Lettings" (Eff. 3/1/05) (Rev 1/1/06). Developed to require insurance policies to be submitted to the letting agency rather than the department.	
LR 107-3	"Disadvantaged Business Enterprise Participation" (Eff. 1/1/07). Developed to require DBE utilization plans to be submitted to the local agency.	
LR 107-4	X "Insurance" (Eff. 2/1/07). Developed based on recommendations from IACE Policy Committee to ensure local agencies are indemnified when their projects are on the state letting.	106
LR 108	"Combination Bids (Eff. 1/1/94) (Rev. 3/1/05). Developed to allow the revision of working days and calendar days. Revised to incorporate applicable portions of deleted Sections 102 & 103.	
LR 212	"Shaping Roadway" (Eff. 8/1/69) (Rev. 1/1/02).	
LR 355-1	"Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix" (Eff. 10/1/73) (Rev. 1/1/07)	
LR 355-2	"Asphalt Stabilized Base Course, Plant Mix" (Eff. 2/20/63) (Rev. 1/1/07)	
LR 400	"Bituminous Treated Earth Surface (Eff. 1/1/07). Developed since Section 401 was eliminated from the 2007 Standard Specifications.	
LR 402	"Salt Stabilized Surface Course" (Eff. 2/20/63) (Rev. 1/1/07)	
LR 403-2	Bituminous Hot Mix Sand Seal Coat" (Eff. 8/1/69) (Rev. 1/1/07)	
LR 420	"PCC Pavement (Special)" (Eff. 5/12/64) (Rev. 1/1/07). Developed to allow local agencies to construct quality PCC pavements for low volume roads.	
LR 442	"Bituminous Patching Mixtures for Maintenance Use" (Eff 1/1/04) (Rev. 2/1/07). Developed to reference approved bituminous patching mixtures.	
LR 451	"Crack Filling Bituminous Pavement with Fiber-Asphalt" (Eff. 10/1/91) (Rev. 1/1/07)	
LR 503-1	"Furnishing Class SI Concrete" (Eff. 10/1/73) (Rev. 1/1/02)	
LR 503-2	"Furnishing Class SI Concrete (Short Load)" (Eff. 1/1/89) (Rev. 1/1/02). Developed to allow a load charge to be added when short loads are expected during the contract.	
LR 542	"Pipe Culverts, Type _____ (Furnished)" (Eff. 9/1/64) (Rev. 1/1/07)	
LR 663	"Calcium Chloride Applied" (Eff. 6/1/58) (Rev. 1/1/07)	
LR 702	"Construction and Maintenance Signs" (Eff 1/1/04) (Rev 1/1/07). Developed to require florescent orange sheeting and a minimum sign size of 48" X 48" on construction and maintenance signs.	
LR 1004	"Coarse Aggregate for Bituminous Surface Treatment" (Eff. 1/1/02) (Rev 1/1/07). Developed to provide a coarser mix when aggregate producers have adjusted the CA-16 gradation according to the Aggregate Gradation Control System (AGCS) to a finer mix for Hot-Mix Asphalt.	
LR 1013	"Rock Salt (Sodium Chloride)" (Eff. 8/1/69) (Rev. 1/1/02)	
LR 1032-1	"Penetrating Emulsions" (Eff. 1/1/07) (Rev. 2/1/07). Developed to combine Penetrating Emulsified Asphalt and Penetrating Emulsified Prime into a single special provision.	
LR 1032-2	"Multigrade Cold Mix Asphalt" (Eff. 1/1/07) (Rev. 2/1/07). Developed to provide the material specification for Multigrade cold mix asphalt.	
LR 1102	"Road Mix or Traveling Plan Mix Equipment" (Eff. 1/1/07). Developed to replace road mix and traveling plant mix bituminous equipment that was eliminated from the Standard Specifications.	

BDE SPECIAL PROVISIONS
For the April 27 and June 15, 2007 Lettings

The following special provisions indicated by an "x" are applicable to this contract. An * indicates a new or revised special provision for the letting.

<u>File Name</u>	<u>Pg#</u>		<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
80108			Asbestos Bearing Pad Removal	Nov. 1, 2003	
72541			Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal (NOTE: This special provision was previously named "Asbestos Waterproofing Membrane and Asbestos Bituminous Concrete Surface Removal".)	June 1, 1989	Jan. 2, 2007
* 80173	107	X	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Jan. 2, 2007
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	Jan. 1, 2007
80166	110	X	Cement	Jan. 1, 2007	
* 80177			Digital Terrain Modeling for Earthwork Calculations	April 1, 2007	
80029	113	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 1, 2007
* 80178	121	X	Dowel Bars	April 1, 2007	
80167	122	X	Electrical Service Installation – Traffic Signals	Jan. 1, 2007	
* 80179			Engineer's Field Office Type A	April 1, 2007	
* 80175			Epoxy Pavement Markings	Jan. 1, 2007	
* 80180	123	X	Erosion and Sediment Control Deficiency Deduction	April 1, 2007	
* 80168	124	X	Errata for the 2007 Standard Specifications	Jan. 1, 2007	April 1, 2007
80169			High Tension Cable Median Barrier	Jan. 1, 2007	
80142	126	X	Hot-Mix Asphalt Equipment, Spreading and Finishing Machine (NOTE: This special provision was previously named "Bituminous Equipment, Spreading and Finishing Machine".)	Jan. 1, 2005	Jan. 1, 2007
* 80181			Hot-Mix Asphalt – Field Voids in the Mineral Aggregate	April 1, 2007	
* 80136			Hot-Mix Asphalt Mixture IL-4.75 (NOTE: This special provision was previously named "Superpave Bituminous Concrete Mixture IL-4.75".)	Nov. 1, 2004	April 1, 2007
80109			Impact Attenuators	Nov. 1, 2003	Jan. 1, 2007
80110			Impact Attenuators, Temporary	Nov. 1, 2003	Jan. 1, 2007
80045			Material Transfer Device	June 15, 1999	Jan. 1, 2007
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2007
80082			Multilane Pavement Patching	Nov. 1, 2002	
80129			Notched Wedge Longitudinal Joint	July 1, 2004	Jan. 1, 2007
* 80182	127	X	Notification of Reduced Width	April 1, 2007	
80069			Organic Zinc-Rich Paint System	Nov. 1, 2001	Jan. 1, 2007
80022	128	X	Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
80148			Planting Woody Plants	Jan. 1, 2006	
80134			Plastic Blockouts for Guardrail	Nov. 1, 2004	Jan. 1, 2007
80119			Polyurea Pavement Marking	April 1, 2004	Jan. 1, 2007
80170			Portland Cement Concrete Plants	Jan. 1, 2007	
80171	130	X	Precast Handling Holes	Jan. 1, 2007	
80015			Public Convenience and Safety	Jan. 1, 2000	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80172	132	X	Reclaimed Asphalt Pavement (RAP)	Jan. 1, 2007	April 1, 2007

<u>File Name</u>	<u>Pg#</u>		<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80160			Reflective Crack Control Treatment	April 1, 2006	Jan. 1, 2007
* 80183	138	X	Reflective Sheeting on Channelizing Devices	April 1, 2007	
80151	139	X	Reinforcement Bars	Nov. 1, 2005	Jan. 1, 2007
80164			Removal and Disposal of Regulated Substances	Aug. 1, 2006	Jan. 1, 2007
* 80184	141	X	Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	April 1, 2007	
80131	147	X	Seeding (NOTE: This special provision was previously named "Seeding and Sodding".)	July 1, 2004	Jan. 1, 2007
80152	149	X	Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	Jan. 1, 2007
80132	154	X	Self-Consolidating Concrete for Precast Products	July 1, 2004	Jan. 1, 2007
* 80127			Steel Cost Adjustment	April 2, 2004	April 1, 2007
80153			Steel Plate Beam Guardrail	Nov. 1, 2005	Jan. 1, 2007
80143	156	X	Subcontractor Mobilization Payments	April 2, 2005	
80075			Surface Testing of Pavements	April 1, 2002	Jan. 1, 2007
80087	157	X	Temporary Erosion Control	Nov. 1, 2002	Jan. 1, 2007
* 80176	158	X	Thermoplastic Pavement Markings	Jan. 1, 2007	
80161			Traffic Signal Grounding	April 1, 2006	Jan. 1, 2007
20338	160	X	Training Special Provisions	Oct. 15, 1975	
80154			Turf Reinforcement Mat	Nov. 1, 2005	Jan. 1, 2007
* 80185			Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	April 1, 2007	
80162			Uninterruptable Power Supply (UPS)	April 1, 2006	Jan. 1, 2007
80149			Variable Spaced Tining	Aug. 1, 2005	Jan. 1, 2007
80163	163	X	Water Blaster with Vacuum Recovery	April 1, 2006	Jan. 1, 2007
80071	164	X	Working Days	Jan. 1, 2002	

The following special provisions have been **deleted** from use:

80139 Portland Cement This special provision is now covered in a BMPR Policy Memorandum "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

80120 Precast, Prestressed Concrete Members This special provision is now in BMPR's "Manual for Fabrication of Precast Prestressed Concrete Products".

80145 Suspension of Slipformed Parapets This special provision is no longer required.

The following special provisions are either in the 2007 Standard Specifications or the 2007 Recurring Special Provisions:

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80156	Aggregate Shipping Tickets	Articles 1003.01(f), 1004.01(f) & 1005.01(d)	Jan. 1, 2006	
80128	Authority of Railroad Engineer	Article 105.02	July 1, 2004	
80065	Bituminous Base Course/Widening Superpave	Sections 355, 356, 1030 & 1102	April 1, 2002	Aug. 1, 2005
80050	Bituminous Concrete Surface Course	Article 406.13(b)	April 1, 2001	April 1, 2003
80066	Bridge Deck Construction	Sections 503, 1004, 1020 & 1103	April 1, 2002	April 1, 2004
80118	Butt Joints	Article 406.08	April 1, 2004	April 1, 2005
80031	Calcium Chloride Accelerator for Portland Cement Concrete Patching	Recurring # 28	Jan. 1, 2001	

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80077	Chair Supports	Article 421.04(a)	Nov. 1, 2002	Nov. 2, 2002
80051	Coarse Aggregate for Trench Backfill, Backfill and Bedding	Sections 208, 542, 550, 1003 & 1004	April 1, 2001	Nov. 1, 2003
80094	Concrete Admixtures	Article 1020.05(b) & Section 1021	Jan. 1, 2003	July 1, 2004
80112	Concrete Barrier	Section 637	Jan. 1, 2004	April 2, 2004
80102	Corrugated Metal Pipe Culverts	Articles 542.04(d), 1006.01(a)(4) & 1006.03(d)	Aug. 1, 2003	July 1, 2004
80114	Curing and Protection of Concrete Construction	Sections 503, 1020 & 1022	Jan. 1, 2004	Nov. 1, 2005
80146	Detectable Warnings	Section 424	Aug. 1, 2005	
80144	Elastomeric Bearings	Section 1083	April 1, 2005	
31578	Epoxy Coating on Reinforcement	Sections 420, 483 & 606	April 1, 1997	Jan. 1, 2003
80041	Epoxy Pavement Marking	Article 1095.04	Jan. 1, 2001	Aug. 1, 2003
80055	Erosion and Sediment Control Deficiency Deduction	Article 105.03(a)	Aug. 1, 2001	Nov. 1, 2001
80103	Expansion Joints	Article 420.05(d)	Aug. 1, 2003	
80101	Flagger Vests	Article 701.13	April 1, 2003	Jan. 1, 2006
80079	Freeze-Thaw Rating	Article 1004.02(f)	Nov. 1, 2002	
80072	Furnished Excavation	Section 204	Aug. 1, 2002	Nov. 1, 2004
80054	Hand Vibrator	Article 1103.17(a)	Nov. 1, 2003	
80147	Illuminated Sign	Sections 801, 891 & 1084	Aug. 1, 2005	
80104	Inlet Filters	Section 280 & Article 1081.15(h)	Aug. 1, 2003	
80080	Insertion Lining of Pipe Culverts	Section 543 & Article 1040.04	Nov. 1, 2002	Aug. 1, 2003
80150	Light Emitting Diode (LED) Pedestrian Signal Head	Sections 801, 881, & 1078	Nov. 1, 2005	April 1, 2006
80067	Light Emitting Diode (LED) Signal Head	Sections 801, 880 & 1078	April 1, 2002	Nov. 1, 2005
80081	Lime Gradation Requirements	Article 1012.03	Nov. 1, 2002	
80133	Lime Stabilized Soil Mixture	Section 310	Nov. 1, 2004	April 1, 2006
80158	Manholes	Article 1042.10	April 1, 2006	
80137	Minimum Lane Width with Lane Closure	Article 701.06	Jan. 1, 2005	
80138	Mulching Seeded Areas	Section 251 & Article 1081.06(a)(4)	Jan. 1, 2005	
80116	Partial Payments	Article 109.07	Sept. 1, 2003	
80013	Pavement and Shoulder Resurfacing	Recurring # 14	Feb. 1, 2000	July 1, 2004
53600	Pavement Thickness Determination for Payment	Articles 407.03, 407.10, 420.03, 420.15 & 421.04	April 1, 1999	Jan. 1, 2004
80155	Payrolls and Payroll Records	Recurring #1 & #5	Aug. 10, 2005	
80130	Personal Protective Equipment	Article 701.12	July 1, 2004	
80073	Polymer Modified Emulsified Asphalt	Article 1032.06	Nov. 1, 2002	
80124	Portable Changeable Message Signs	Articles 701.15(j), 701.20(h) & 1106.02(j)	Nov. 1, 1993	April 2, 2004
80083	Portland Cement Concrete	Articles 1103.01 & 1103.02	Nov. 1, 2002	
80036	Portland Cement Concrete Patching	Sections 442, 701, 1013 & 1020	Jan. 1, 2001	Jan. 1, 2004
419	Precast Concrete Products	Sections 540, 1020 & 1042	July 1, 1999	Nov. 1, 2004
80084	Preformed Recycled Rubber Joint Filler	Articles 503.02, 637.02 & 1051.10	Nov. 1, 2002	
80121	PVC Pipeliner	Recurring # 18	April 1, 2004	April 1, 2005
80159	Railroad Flaggers	Article 107.12	April 1, 2006	
80122	Railroad, Full-Actuated Controller and Cabinet	Articles 857.04, 1073.01(c)(2) & 1074.03(a)(5)e.	April 1, 2004	
80105	Raised Reflective Pavement Markers (Bridge)	Articles 781.03(a), 781.05 & 1096.01(b)	Aug. 1, 2003	

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80011	RAP for Use in Bituminous Concrete Mixtures	Sections 1030 & 1031	Jan. 1, 2000	April 1, 2002
80032	Remove and Re-Erect Steel Plate Beam Guardrail and Traffic Barrier Terminals	Section 633	Jan. 1, 2001	Jan. 1, 2005
80085	Sealing Abandoned Water Wells	Section 672	Nov. 1, 2002	
80096	Shoulder Rumble Strips	Section 642	Jan. 1, 2003	
80140	Shoulder Stabilization at Guardrail	Article 630.06	Jan. 1, 2005	
80135	Soil Modification	Section 302	Nov. 1, 2004	April 1, 2006
80070	Stabilized Subbase and Bituminous Shoulders Superpave	Sections 312, 482, 1030 & 1102	April 1, 2002	Aug. 1, 2005
80086	Subgrade Preparation	Section 301	Nov. 1, 2002	
80010	Superpave Bituminous Concrete Mixtures	Sections 406, 407 & 1030	Jan. 1, 2000	April 1, 2004
80039	Superpave Bituminous Concrete Mixtures (Low ESAL)	Sections 406, 407 & 1030	Jan. 1, 2001	April 1, 2004
80092	Temporary Concrete Barrier	Section 704	Oct. 1, 2002	Nov. 1, 2003
80008	Temporary Module Glare Screen System	Recurring # 22	Jan. 1, 2000	
80106	Temporary Portable Bridge Traffic Signals	Recurring # 23	Aug. 1, 2003	
80098	Traffic Barrier Terminals	Section 631	Jan. 1, 2003	
57291	Traffic Control Deficiency Deduction	Article 105.03(b)	April 1, 1992	Jan. 1, 2005
80107	Transient Voltage Surge Suppression	Article 1074.03(a)(4)	Aug. 1, 2003	
80123	Truck Bed Release Agent	Article 1030.08	April 1, 2004	
80048	Weight Control Deficiency Deduction	Article 109.01	April 1, 2001	Aug. 1, 2002
80090	Work Zone Public Information Signs	Recurring # 24	Sept. 1, 2002	Jan. 1, 2005
80125	Work Zone Speed Limit Signs	Article 701.14(b)	April 2, 2004	Jan. 1, 2006
80126	Work Zone Traffic Control	Articles 701.19 & 701.20	April 2, 2004	Nov. 1, 2005
80097	Work Zone Traffic Control Devices	Section 701 & Article 1106.02	Jan. 1, 2003	Nov. 1, 2004

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the “**Standard Specifications for Road and Bridge Construction**”, adopted January 1, 2007 (hereinafter referred to as the "Standard Specifications"); the latest edition of the “**Manual on Uniform Traffic Control Devices for Streets and Highways**”; the “**Manual of Test Procedures for Materials**” in effect on the date of invitation for bids; and the “**Supplemental Specifications and Recurring Special Provisions**” indicated on the Check Sheet included herein; all of which apply to and govern the construction of F.A.U. Route 3869 (Haligus Road), Section 06-00030-00-FP, Project: M-8003(641), and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Location of Project

This project is located along Haligus Road and Reed Road in the Village of Huntley in McHenry County. The limits of the project on Haligus Road are from Algonquin Road on the south to approximately 200 north of Reed Road. The project has a gross and net length of 2,814.5 feet (0.533 mile) on Haligus Road. The limits of the project on Reed Road are from approximately 200 feet west of Haligus Road to approximately 1,070 feet east of Haligus Road. The project has a net and gross length of 1,271 feet (0.241 mile) on Reed Road.

Description of Project

This is a new roadway construction and existing roadway widening project, and the work to be performed under this contract consists of earth excavation and pavement removal, construction of storm sewers and drainage structures, combination concrete curb and gutter, concrete shoulder, aggregate shoulder, hot-mix asphalt base, binder and surface courses, temporary traffic signal installation, channelization with thermoplastic pavement markings, and all incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

Completion Date

The Contractor shall schedule his operations to complete all work and open all roadways to traffic on or before November 19, 2007. An additional 5 working days will be allowed beyond the November 19, 2007 completion date to allow for punch list items

Cooperation with Adjacent Contracts

The intent of this provision is to inform the Contractor that the Village is aware of adjacent contracts that are currently scheduled during the same time period as this contract.

FAP 339 – Algonquin Road (CH 32) – Section 00-00257-00-WR
Reconstruction of Algonquin Road

The Contractor is required to cooperate with these adjacent contracts in accordance with Section 105.08 of the Standard Specifications and may be required to modify his staging operations in order to meet these requirements.

Maintenance of Roadways

Effective: September 30, 1985

Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the "Standard Specifications".

Traffic Control Plan

Effective: September 30, 1985

Revised: October 1, 1995

Traffic Control shall be in accordance with the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS

701006-02, 701201-02, 701301-02, 701326-02, 701501-03, 701606-04, 701801-03, and 702001-06.

DETAILS (included in the plans)

Traffic Control and Protection for Side Roads, Intersections & Driveways
Temporary Information Signing

RECURRING SPECIAL PROVISIONS

LRS 3: Work Zone Traffic Control
LRS 4: Flaggers in Work Zones

SPECIAL PROVISIONS

- “Traffic Control and Protection (Special)”
- “Temporary Information Signing”
- “Maintenance of Roadways”
- “Keeping Roads Open to Traffic”

Traffic Control and Protection (Special)

This item of work shall include furnishing, installing, maintaining, replacing, relocating and removing all traffic control devices used for the purpose of regulating, warning or directing traffic during construction or maintenance of this improvement.

Traffic Control and Protection shall be provided as called for in the plans, these Special Provisions, applicable Highway Standards, and applicable sections of the Standard Specifications.

The governing factor in the execution and staging of work for this project is to provide the motoring public and pedestrian public with the safest possible travel conditions through the construction zone.

All traffic control devices used on this project shall conform to the plans, Special Provisions, Traffic Control Standards, Traffic Specifications and the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD).

Traffic Control Devices include signs and their supports, signals, pavement markings, barricades with sand bags, channelizing devices, warning lights, arrowboards, flaggers, or any other device used for the purpose of regulating detouring, warning or guiding traffic through or around the construction zone.

Only signs, barricades, vertical panels, drums and cones that meet the requirements of the Department's "Quality Standard for Work Zone Traffic Control Devices - 1998" shall be used on this project. Copies of this publication are available from the Bureau of Traffic for the Contractor's use prior to the initial set-up. At the time of the initial set-up or at the time of major stage changes, 100 percent of each type of device (cones, drums, barricades, vertical panels or signs) shall be acceptable as defined by the referenced publication. Throughout the duration of the project, the percentage of acceptable devices may decrease to 75 percent only as a result of damage and/or deterioration during the course of work. Work shall not begin until a determination has been made that the traffic control devices meet the quality required in this standard.

The Contractor is required to conduct routine inspections of the worksite at a frequency that will allow for the prompt replacement of any traffic control device that has become displaced, worn or damaged to the extent that it no longer conforms to the shape, dimensions, color and operational requirements of the MUTCD, the Traffic Control Standards or will no longer present a neat appearance to motorists. A sufficient quantity of replacement devices, based on vulnerability to damage, shall be readily available to meet this requirement.

The Contractor shall be responsible for the proper location, installation and arrangement of all traffic control devices. Special attention shall be given to advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement at all times. The Contractor shall immediately remove, cover or turn from the view of the motorists all traffic control devices which are inconsistent with detour or lane assignment patterns and conflicting conditions during

the transition from one construction stage to another. When the Contractor elects to cover conflicting or inappropriate signing materials used shall totally block out reflectivity of the sign and shall cover the entire sign. The method used for covering the signing shall meet with the approval of the Engineer.

When directed by the Engineer, the Contractor shall remove all traffic control devices which were furnished, installed and maintained by him under this contract, and such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

The Contractor shall ensure that all traffic control devices installed by him are operational, functional and effective 24 hours a day, including Sundays and holidays.

Signs. All signs except those referring to daily lane closures shall be post mounted in accordance with Standard 702001 for all projects that exceed four days.

Construction signs referring to daytime lane closures during working hours shall be removed, covered or turned away from the view of the motorists during non-working hours.

Prior to the beginning of construction operations, the Contractor will be provided a sign log of all existing signs within the limits of the construction zone. The Contractor is responsible for verifying the accuracy of the sign log. Throughout the duration of this project, all existing traffic signs shall be maintained by the Contractor. All provisions of Article 107.25 of the Standard Specifications shall apply except the third paragraph shall be revised to read: "The Contractor shall maintain, furnish and replace at his own expense, any traffic sign or post which has been damaged or lost by the Contractor or a third party. The Contractor will not be held liable for third party damage to large freeway guide signs".

Placement and Removal of Signs and Barricades. Placement of all signs and barricades shall proceed in the direction of flow of traffic. Removal of all signs and barricades shall start at the end of the construction areas and proceed toward oncoming traffic unless otherwise directed by the Engineer.

Public Safety and Convenience. The Contractor shall provide the Engineer a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis to receive notification of any deficiencies regarding traffic control and protection. The Contractor shall dispatch men, materials and equipment to correct any such deficiencies. The Contractor shall respond to any call from the Engineer concerning any request for improving or correcting traffic control devices and begin making the requested repairs within two hours from the time of notification.

When traveling in lanes open to public traffic, the Contractor's vehicle shall always move with and not against or across the flow of traffic. These vehicles shall enter or leave work areas in a manner which will not be hazardous to, or interfere with, traffic and shall not park or stop except within designated work areas. Personal vehicles shall not park within the right of way except in specific areas designated by the Engineer.

Basis of Payment. All traffic control and protection (except traffic control pavement marking) indicated on the maintenance of traffic plans and specified in the Special Provisions, and/or required by the Engineer, will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL), which price shall be payment in full for all labor, materials, equipment, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices required, as indicated on the plans and approved by the Engineer.

Temporary Information Signing

This item shall consist of furnishing, installing, maintaining and subsequently removing temporary informational signing at locations and in accordance with the details included in the plans.

Materials shall be according to the following portions of Section 1000 of the "Standard Specifications":

- a. Sign Base (see Notes 1 & 2).....Section 1090
- b. Sign Face (see Note 3).....Section 1091
- c. Sign Legends.....Section 1092
- d. Sign Supports.....Section 1093
- e. Overlay Panels (see Note 4).....Article 1090.01

Note 1. The Contractor may use 5/8-inch instead of 3/4-inch plywood.

Note 2. Type A sheeting can be used on the plywood base.

Note 3. All sign faces shall be Type A except that all orange signs shall meet the requirements of Article 1106.01.

Note 4. The overlay panels shall be 0.08-inch thick.

The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication. The legends shall be as determined by the Engineer.

The signs shall be placed along the roadway according to the requirements of Articles 701.14 and 701.16. They shall be 7 feet above the near edge of the pavement and a minimum of 2 feet beyond the back of curb. A minimum of 2 posts shall be used.

Basis of Payment. This work will be paid for at the contract unit price per square foot for TEMPORARY INFORMATION SIGNING, which price shall include all hardware, posts or skids, supports and connections required for mounting the signs in a manner approved by the Engineer.

Keeping Roads Open to Traffic

The Contractor may close one lane of traffic (because of construction) only between the hours of 9:00 a.m. and 3:00 p.m., when approved by the Engineer.

When necessary to close one lane of the roadway, the Contractor shall maintain one-way traffic during the restricted hours with the use of signs and flaggers as shown on the Traffic Control Standards. Two lanes of traffic will be maintained between 3:00 p.m. and 9:00 a.m. and when no construction activities are being carried on. The Engineer may waive the lane closure time restriction at his discretion.

The Contractor shall limit any drop-off between lanes to 1-1/2" during any overnight period.

Status of Utilities to be Adjusted

Effective: January 30, 1987 Revised: July 1, 1994

Utility companies involved in this project have provided the following estimated dates:

Name of Utility	Type	Location	Estimated Dates for Start and Completion of Relocation or Adjustments
NICOR	No conflicts anticipated		
ComED	Underground cables	Haligus/Reed intersection	Prior to construction
SBC	Handhole reconstruction	Haligus/Reed intersection	During construction
AT&T	No conflicts anticipated		
Comcast	No conflicts anticipated		

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

Removal of Miscellaneous Items

Regarding the removal and disposal of any existing fences, gates, signs (except traffic and street name signs) or other miscellaneous items which may interfere with construction operations, the Contractor shall, with the approval of the Engineer, remove and dispose of these items outside the limits of the right-of-way at locations provided by him and, if pay items for such removal are not included in the contract, the work shall be considered incidental to the contract.

However, if any fences, gates, signs (except traffic and street name signs) or other miscellaneous items are to be removed and replaced as directed by the Engineer, the Contractor will be paid in accordance with Article 109.04 of the "Standard Specifications".

Concrete Breakers

When removing curb and gutter, pavement or any other structure, the Contractor shall take every precaution necessary to ensure that there will be no damage to underground public or private utilities. Under no circumstances will the use of a frost ball concrete breaker be allowed.

Disposal of Surplus Material

The Contractor is prohibited from burning any material within or adjacent to the project limits.

All excess or waste material shall be either hauled away from the project site by the Contractor and deposited at locations provided by him, or disposed of within the right-of-way in a manner other than burning, subject to the approval of the Engineer.

No extra compensation will be allowed the Contractor for any expense incurred by complying with the requirements of this Special Provision.

Porous Granular Embankment, Subgrade

Effective: September 30, 1985

Revised: January 1, 2007

This work consists of furnishing, placing, and compacting porous granular material to the lines and grades shown on the plans or as directed by the Engineer in accordance with applicable portions of Section 207. The material shall be used as a bridging layer over soft, pumpy, loose soil and for placing under water and shall conform with Article 1004.04 except the gradation shall be as follows:

1. Crushed Stone, Crushed Blast Furnace Slag, and Crushed Concrete

<u>Sieve Size</u>	<u>Percent Passing</u>
*6 in. (150 mm)	97 ± 3
*4 in. (100 mm)	90 ± 10
2 in. (50 mm)	45 ± 25
No. 200 (75 µm)	5 ± 5

2. Gravel, Crushed Gravel and Pit Run Gravel

<u>Sieve Size</u>	<u>Percent Passing</u>
*6 in. (150 mm)	97 ± 3
*4 in. (100 mm)	90 ± 10
2 in. (50 mm)	55 ± 25
No. 4 (4.75 mm)	30 ± 20
No. 200 (75 µm)	5 ± 5

*For undercut greater than 18 inches (450 mm) the percent passing the 6 inch (150 mm) sieve may be 90 ± 10 and the 4 inch (100 mm) sieve requirements eliminated.

The porous granular material shall be placed in one lift when the total thickness to be placed is 2 feet (600 mm) or less or as directed by the Engineer. Each lift of the porous granular material shall be rolled with a vibratory roller meeting the requirements of Article 1101.01(g) to obtain the desired keying or interlock and compaction. The Engineer shall verify that adequate keying has been obtained.

A 3 inch (75 mm) nominal thickness top lift of capping aggregate having a gradation of CA 6 will be required when Aggregate Subgrade is not specified in the contract and Porous Granular Embankment, Subgrade will be used under the pavement and shoulders. Capping aggregate will not be required when

embankment meeting the requirements of Section 207 or granular subbase is placed on top of the porous granular material.

Construction equipment not necessary for the completion of the replacement material will not be allowed on the undercut areas until completion of the recommended thickness of the porous granular embankment subgrade.

Full depth subgrade undercut should occur at limits determined by the Engineer. A transition slope to the full depth of undercut shall be made outside of the undercut limits at a taper of 1 foot (300 mm) longitudinal per 1 inch (25 mm) depth below the proposed subgrade or bottom of the proposed aggregate subgrade when included in the contract.

Method of Measurement. This work will be measured for payment in accordance with Article 207.04. When specified on the contract, the theoretical elevation of the bottom of the aggregate subgrade shall be used to determine the upper limit of Porous Granular Embankment, Subgrade. The volume will be computed by the method of average end areas.

Basis of Payment. This work shall be paid for at the contract unit price per cubic yard (cubic meter) for POROUS GRANULAR EMBANKMENT, SUBGRADE which price shall include the capping aggregate, when required.

The Porous Granular Embankment, Subgrade shall be used as field conditions warrant at the time of construction. No adjustment in unit price will be allowed for an increase or decrease in quantities from the estimated quantities shown on the plans.

Trench Backfill

TRENCH BACKFILL shall be performed in accordance with applicable portions of Sections 208 and 550 of the "Standard Specifications" except that only Method 1 shall be used when placing backfill materials.

Basis of Payment. This work shall be paid for at the contract unit price per cubic yard for TRENCH BACKFILL.

Exploration Trench, Special

This item shall consist of excavating a trench at locations designated by the Engineer for the purpose of locating existing tile lines or other underground facilities within the limits of the proposed improvement. The trench shall be deep enough to expose the line but not more than one foot deeper than the line, and the width of the trench shall be sufficient to allow proper investigation to determine if the line needs to be replaced.

The exploration trench shall be backfilled with gradation CA 6 stone, the cost of which shall be included in the item of Exploration Trench, Special.

Basis of Payment. This work will be paid for at the contract unit price per foot for EXPLORATION TRENCH, SPECIAL, regardless of the depth required, and no extra compensation will be allowed for any delays, inconveniences or damages sustained by the Contractor in performing the work.

Portland Cement Concrete Sidewalk 5 Inch, Special

Description. This work shall consist of the construction of Portland Cement Concrete sidewalks at the locations shown on the plans in accordance with Section 424 of the Standard Specifications except as noted herein.

Materials. Materials shall comply with the requirements of Section 1006, 1020 and 1051 of the Standard Specifications for Class SI concrete.

Construction Methods. The proposed sidewalk shall be poured to a minimum thickness as specified on the plans unless otherwise directed by the Engineer. The sidewalk shall be placed on a 2-inch aggregate base consisting of Sub-Base Granular Material, Type B.

All crosswalks shall be poured with curb ramps accessible to the disabled per the requirements of the Standard Specifications.

Measurement. Measurement for sidewalk shall be per square foot for the actual length of sidewalk multiplied by the width of sidewalk placed.

Payment. Payment for the PORTLAND CEMENT CONCRETE SIDEWALK of the thickness specified (SPECIAL) shall be made at the contract unit price per square foot. Payment shall be full compensation for all materials, labor, excavation, aggregate base, equipment and incidentals to complete the item as shown on the plans and as specified.

Detectable Warning

Description. This work shall consist of the construction of Detectable Warnings at the locations shown on the plans in accordance with Section 424 of the Standard Specifications except as noted herein.

Materials. Detectable warnings shall be a cast-in-place system. Stamped concrete will not be allowed. The color of the detectable warning surface shall be brick red, or approved equivalent. Detectable warnings shall be cast-in-place systems manufactured by Detectable Warning Systems, Inc (EZ Set Polymer Concrete Panel), Armor Tile (Cast in Place systems), or approved equal.

Construction Methods. The detectable warning panels shall be installed according to the manufacturer's recommendations. The panels shall be placed into sidewalk meeting the requirements listed in the special provision "Portland Cement Concrete Sidewalk 5 Inch, Special."

Measurement. Measurement for detectable warnings shall be per square foot.

Payment. Payment for DETECTABLE WARNING will be made at the contract unit price per square foot. Payment shall be full compensation for all materials, labor, excavation, portland cement concrete sidewalk, aggregate base, equipment and incidentals to complete the item as shown on the plans and as specified.

Hot-Mix Asphalt Surface Removal, Special

This work shall consist of the removal of the existing bituminous surface and shall be performed in accordance with Section 440 of the Standard Specifications with the following exception:

The typical depth of milling shall be 2". At locations determined by the Engineer the depth of the milling may be increased or decreased in order to provide the proper cross slope or to allow for the minimum lift thickness of hot-mix asphalt surface course. The additional milling may require multiple passes with the milling machine on multiple days. This additional milling depth shall be included in the cost of the pay item HOT-MIX ASPHALT SURFACE REMOVAL, SPECIAL.

Method of Measurement. Hot-mix asphalt surface removal shall be measured for payment in place and the area computed in square yards. If multiple passes are required to mill to the required depth, only the first pass shall be measured.

Basis of Payment. This work shall be paid for at the contract unit price per square yard for HOT-MIX ASPHALT SURFACE REMOVAL, SPECIAL, regardless of the depth of surface removed.

Portland Cement Concrete Shoulders 8"

This work shall consist of constructing portland cement concrete shoulders in accordance with Section 483 of the Standard Specifications, with the following modification:

483.06 Joints. Delete this section and replace with the following:

Transverse Contraction and Transverse Expansion Joints. Contraction and expansion joints shall be constructed as shown on IDOT Highway Standard 606001-03. Two dowel bars will be required at each joint as shown on the detail.

Method of Measurement and Basis of Payment. Remains unchanged.

Ductile Iron Water Main

Description. The Contractor shall furnish and install the proposed water main of the diameter specified at the locations shown on the plans. This item shall include excavation, granular bedding, installation of the water main, testing and chlorination of the watermain, backfill and compaction of the trench and all incidental items required for a complete and operational water main.

Materials. Water main pipe, unless otherwise specified shall be of the following materials:

Ductile iron pipe shall comply with ANSI A21.51, thickness special Class 52, with joints complying with ANSI A21.11. External coating shall be standard, as specified for general use in ASA Specification A21.51.

Ductile iron pipe shall have an internal cement lining complying with ANSI A21.4 or AWWA C205, standard thickness.

Ductile iron fittings shall have mechanical joints complying with ANSI A21.10 or A21.53. Internal cement lining shall comply with ANSI A21.4, standard thickness.

All ductile iron water main shall be wrapped with polyethylene material conforming to AWWA C-105-77 or ANSI 21.5, with a minimum thickness of eight mils. This specification may be waived based on a report by the Ductile Iron Pipe Research Association or other approved testing laboratory which would declare the soil for the subject installation non-corrosive.

Construction Methods. The water main shall be installed as detailed on the plans and in accordance with the applicable provisions of the Standard Specifications for Water and Sewer Main Construction in Illinois. The water main shall be installed to the grades shown on the plans and shall have a nominal minimum depth of cover of six feet. The excavation for the water main should be made using trench equipment or other suitable excavating equipment.

Granular bedding shall be placed and compacted along the entire length of all water main, a minimum of four inches below the water main to a point level with the top of the water main, and consist of gravel or crushed stone ¼-inch to one inch in size. As a minimum, the bedding material shall conform to the requirements of the Standard Specifications for CA7, CA8, CA11 or CA13.

If the excavation has been made deeper than necessary, the water main shall be laid at the lower depth, and no additional cost shall be charged for the extra excavation, trench backfill, or for subsequent adjustments to fire hydrants, valve vaults or house services. All excavated materials not needed for backfilling the trenches shall be disposed of by the Contractor.

Non-paved areas shall be backfilled from a point level with the top of the water main with originally excavated material free from rocks, frozen material or large clods and shall be carefully placed and compacted to prevent damage to or the dislodging of the water main pipe. In paved areas, the excavation shall be backfilled with Trench Backfill meeting the requirements of the special provision included herein. The backfilling shall be compacted in accordance with Section 550.07 of the Standard Specifications.

Separation from sewer shall conform to Sections 41-2.01B (1) through 41-2.01D of the Standard Specifications for Water and Sewer Main Construction in Illinois, latest edition.

Water in the trench shall be removed during pipe laying and jointing operations. Provisions shall be made to prevent floating of the pipe. Trench water shall not be allowed to enter the pipe at any time.

Adequate provisions shall be made for safely storing and protecting all water pipe prior to the actual installation in the trench. Care shall be taken to prevent damage to the pipe castings, both inside and out. Provisions shall be made to keep the inside of the pipe clean throughout its storage period and to keep mud and/or debris from being deposited therein. All pipe shall be thoroughly cleaned on the inside before laying. Proper equipment shall be used for the safe handling, conveying and laying of the pipe. All pipe shall be carefully lowered into the trench, piece by piece, by means of suitable tools or equipment, in such a manner as to prevent damage to water main materials and protective coatings and linings. Under no circumstances shall water main material be dropped or dumped into the trench.

The pipe shall be inspected for defects. All lumps, blisters and excess coal tar coating shall be removed from the ends of each pipe, and the inside of the bell.

Blocking to prevent movement of mains under pressure at bends and fittings shall be Class SI Concrete, a minimum of 12 inches thick, placed between solid ground and the fittings in such a manner that pipe fitting and joints will be accessible for repairs. All bends of 22 ½ degrees or greater, and all tees and plugs shall be thrust protected to prevent movement of the line under pressure. Thrust protection may also be attained by the use of a combination or retaining glands and threaded rod.

Testing. The following procedures are to be strictly followed by all persons engaged in the pressure testing and/or disinfection of public water distribution mains. The requirements of these design standards and the requirements of the Illinois Environmental Protection Agency water permit shall be strictly enforced.

The Contractor is required to provide any and all equipment necessary to complete the pressure testing and/or disinfection of the water mains and services. Prior to any test, the Contractor shall arrange with the Village Public Works Department to have the required tests witnessed, and shall give a minimum of 48 hours advance notice.

The Contractor shall not operate any valves in the existing public water supply system. Requests for valve operations are to be made through the Public Works Department. Requests for valve operations shall be made 24 hours prior to any scheduled operations or tests.

The Contractor shall pressure test all new water mains after water services have been installed. The Contractor shall perform a preliminary test to insure that all segments of the system meet the leakage rates as forth herein. When the Contractor has assured himself that the system will meet the required leakage rates, he will arrange for witnessing of the pressure test by the Village Public Works Department and Huntley Fire Protection District. Forty-eight hours advance notice shall be given. The tests shall be conducted as follows:

A. Hydrostatic Tests.

- 1) Where any section of a water line is provided with concrete thrust blocking for fitting, the hydrostatic tests shall not be made until at least five days after installation of the concrete thrust blocking.
- 2) Disposal of wastewater from hydrostatic test, and for disinfection, shall be approved in advance by the Village Public Works Department. Full bore flushing shall be witnessed by the Huntley Fire Protection District. (HFPD).
- 3) The water mains and service lines, including valves and hydrants, shall be subjected to a hydrostatic pressure 125 psi.
- 4) The test pressure shall be held for a duration of one hour without pressure loss or further pressure application.
- 5) Each valve shall be opened and closed several times during the test.
- 6) Careful examination of exposed pipe, joints, fitting, and valves is required.
- 7) Joints showing visible leakage shall be remade or replaced.
- 8) Cracked pipe, defective pipe, and cracked or defective joints, fittings, and valves shall be replaced with sound material and the test repeated until results are satisfactory.

B. Leakage Test

- 1) A metered leakage test shall be conducted after the pressure test has been satisfactorily completed.
- 2) Duration of each leakage test shall be at least 24 hours.
- 3) During the test, water lines shall be subjected to the normal water pressure of the Village water system.
- 4) Maximum allowable leakage shall be four gallons per inch of pipe diameter per 1,000 feet of pipe per 24 hours as recorded by a meter approved and witnessed by the Village Public Works Department and HFPD.
- 5) Should any test of pipe disclose leakage greater than the maximum allowable amount, the defective joint or joints shall be located and repaired and the 24-hour metered leakage test repeated until the leakage is within the specified allowance.

Disinfection. After all mains have been pressure tested and accepted by the Village, the Contractor shall proceed to disinfect the main in accordance with AWWA standard C-651. A chlorine concentration during disinfection shall be maintained at a minimum 50 mg/l available chlorine. The chlorinated water shall be retained in the main for a period of at least 24 hours. At the end of the 24-hour period, the treated water shall contain no less than 25 mg/l chlorine throughout the main. The Contractor shall sample the chlorinated disinfecting solution to assure that these minimums are maintained.

After an applicable retention period, the heavily chlorinated water shall be flushed from the main until the chlorine concentration in the water leaving the main is not higher than that generally prevailing in the system. After final flushing, and as witnessed by the Village Public Works Department, two samples of water shall be obtained from the main for bacteriological testing. The Village of Huntley Water Department shall be responsible for obtaining and delivery of the samples for testing purposes. For major water main installation, the number of samples may be increased as determined by the Village Public Works Department. A second series of samples shall be bacteriologically tested to show the absence of coliform organisms.

If both sets of samples are satisfactory, all valves on the system shall be opened with permission of the Village Public Works Department. The Contractor and the Village will be furnished with copies of the bacteriological report for their records.

If either, or both, sets of samples do not pass the bacteriological examination, the Contractor shall again disinfect the main in accordance with the procedures until such time that satisfactory samples are collected.

Method of Measurement. Water main shall be measured per foot in place. Water mains shall be measured along the center line of the water main from the center of the valve to the center of the valve, fittings, or end of the pipe.

Basis of Payment. Payment for water main shall be made at the contract unit price per foot for DUCTILE IRON WATER MAIN, of the diameter specified. Payment shall be full compensation for excavation, granular bedding, installation of water main, backfill, pressure testing, chlorination and all

labor, materials, equipment and incidentals as shown on the plans and as specified to construct a complete and operational water main.

Trench backfill shall be paid for separately.

Water Valves 12"

This work shall be performed in accordance with the applicable portions of Section 561 of the Standard Specifications and Section 42 of the Water and Sewer Specifications with the following alterations:

Materials. All valves 12 inches and larger shall be butterfly valves Mueller B-3211-20 iron body rubber seat type conforming to AWWA C504 latest edition, Class 150-B, or approved equal. All valves shall open counter clockwise with non-rising stem (except hand valves).

Method of Measurement. Water valves shall be measured per each.

Basis of Payment. Valves will be paid for at the contract unit price each for WATER VALVES, of the size specified, which price shall include all labor, materials and equipment required to complete the work as specified herein.

Adjusting Watermain

This work shall consist of adjusting existing water mains when directed by the Engineer where they are in conflict with new improvements or where the proposed construction will reduce the cover over the watermain. All materials used in adjusting water mains shall meet the requirements of be per the owning agency's standards and shall be in accordance with Section 40 of the Standard Specification for Water and Sewer Main Construction in Illinois, latest edition. All adjustment in the line or grade of the existing water main shall be approved by the Engineer.

All materials, labor, and equipment necessary to adjust the watermain shall be on hand before shutdown and cutting of the existing main. The Contractor shall take every precaution to hold the interruption of service to a minimum.

A minimum clearance of eighteen inches (18") shall be maintained between the adjusted main and improvement for which the adjustment was made. A downward adjustment will be required unless 5.5' of cover can be maintained for an upward adjustment or as approved by the Engineer.

Adequate precautions shall be taken to prevent contaminants from entering the existing main. The inside surface of all new materials used in the adjustment shall be cleaned of all foreign materials and swabbed with a solution of efficient bactericide before assembly. The adjusted section shall then be flushed with potable water.

Thrust blocking of Class SI concrete shall also be placed where required and as directed by the Engineer.

Forty-eight (48) hours prior to shutting down the existing main for the adjustments, the facility owner and all users that will be affected shall be notified in writing. The Contractor shall distribute notices of the shut down to the residents affected. The Contractor shall cooperate with the local agency personnel to locate valves necessary to isolate the work area. All valves will be operated by personnel from the owning agency.

Basis of Payment. This work will be paid for at the contract unit price per foot for ADJUSTING WATERMAIN of the size specified. This price shall include the cost of all materials, pipe, adapters, joint materials, fittings, blocking, trench backfill, removal and disposal of existing main, and all work and equipment necessary to make a complete and finished installation.

Fire Hydrant to be Moved

This work shall be done in accordance with Section 564 of the Standard Specifications except as modified herein and as shown on the details on the plans. This item includes the removal of an existing fire hydrant, auxiliary valve and valve box, removal of the existing tee on the main, installation of a new tee and bends, new hydrant lead piping, reinstallation of the old fire hydrant, auxiliary valve and valve box, vertical adjustment of the hydrant and valve box to the required grade (as directed by the Engineer), thrust blocking, backfill and any necessary fittings. The existing fire hydrant shall be disassembled and reassembled in order to provide the correct orientation of the hydrant and the lead pipe, if required.

All new piping and fittings shall meet the requirements listed in the special provision "Ductile Iron Water Main".

All work, including operation of valves and water main shut-downs, shall be coordinated with the Village.

Disinfecting shall be in accordance with AWWA C601 for Disinfection Procedures when Cutting into or Repairing Existing Mains.

Prior to any work on the water system requiring a shut-down, the dimensions of the existing main shall be verified to assure proper sizing of new fittings. All water main work shall be coordinated to limit the number of shut-downs to one and to minimize the duration of the shut-down.

If vertical adjustment of the fire hydrant is required, this work shall be in accordance with the special provision "Fire Hydrant to be Adjusted", except that payment shall be included in the cost of FIRE HYDRANT TO BE MOVED.

This work will be paid for at the contract unit price per each for FIRE HYDRANT TO BE MOVED which price shall be payment in full for all labor, equipment, and materials necessary to complete the work specified herein and as shown on the details included in the plans.

Fire Hydrant to be Adjusted

This item consists of vertical adjustment of fire hydrants, including auxiliary valves and valve boxes, that are to remain in place. All applicable portions of Section 564 of the Standard Specifications and Section 45 of the Water and Sewer Specifications shall apply.

Fire Hydrant adjustments shall be accomplished with one extension mechanism. Combining extension mechanisms to achieve the required height will not be allowed.

This work shall be measured per each hydrant to be adjusted.

This work shall be paid for at the contract unit price each for FIRE HYDRANT TO BE ADJUSTED, which price shall include the labor, equipment and materials necessary to raise or lower existing fire hydrants and auxiliary valves and valve boxes to an elevation acceptable to the agency maintaining the fire hydrants.

Pipe Drains

This work shall conform to the requirements of Section 601 of the "Standard Specifications" except that the pipe drain material shall be limited to Article 601.01 (l) Polyvinyl Chloride (PVC) pipe or (o) Corrugated Polyvinyl Chloride (PVC) pipe with a smooth interior. The pipe drains shall be installed at the locations directed by the Engineer.

Basis of Payment. PIPE DRAINS will be paid for at the contract unit price per foot for the diameter specified.

Pipe Underdrains, Fabric Lined Trench, 4"

This work shall conform to Section 601 of the "Standard Specifications" except that the underdrain material shall be limited to either (1) perforated polyvinyl chloride (PVC) pipe conforming to Article 1040.03, or (2) perforated corrugated polyvinyl chloride (PVC) pipe with a smooth interior conforming to Article 1040.03.

Both the trench and the pipe shall be wrapped with non-woven geotextile filter fabric, as shown on the detail included in the plans and as approved by the Engineer. The cost of the fabric and the washed CA 16 aggregate backfill shall be included in the contract unit price for this item. The cost of connecting the underdrain to existing structures shall be included in the contract unit price for this item.

Basis of Payment. This work will be paid for at the contract unit price per foot for PIPE UNDERDRAINS, FABRIC LINED TRENCH, 4".

Flat Slab Top

This item shall consist of the installation of a flat slab top in place of a cone section on proposed structures where a cone section cannot be placed due to depth restrictions.

For structures having Type 8 grates, a 24-inch inside diameter by 4-inch (minimum) high riser shall be installed on the flat slab to provide earth cover over the slab for vegetation.

This work shall not be paid for but shall be considered incidental to the structure requiring the flat slab top.

Manholes to be Adjusted (Special)

This work shall consist of adjusting existing manholes at locations indicated on the plans. This work shall be performed in accordance with Section 602 of the Standard Specifications with the following addition:

A new external chimney seal which fully encompasses the rings and castings shall be installed after the frame has been adjusted to the final elevation. The chimney seal shall be the Internal/External Adaptor Seal manufactured by Adaptor Inc. or approved equal. The Contractor shall obtain the Engineer's approval of the chimney seal prior to its installation.

Basis of Payment. This work shall be measured and paid for at the contract unit price per each for MANHOLES TO BE ADJUSTED (SPECIAL) which price shall include all labor, equipment, and materials necessary to perform said work.

Manholes to be Reconstructed (Special)

This work shall consist of adjusting existing manholes at locations indicated on the plans. This work shall be performed in accordance with Section 602 of the Standard Specifications with the following addition:

A new external chimney seal which fully encompasses the rings and castings shall be installed after the frame has been adjusted to the final elevation. The chimney seal shall be the Internal/External Adaptor Seal manufactured by Adaptor Inc. or approved equal. The Contractor shall obtain the Engineer's approval of the chimney seal prior to its installation.

Basis of Payment. This work shall be measured and paid for at the contract unit price per each for MANHOLES TO BE RECONSTRUCTED (SPECIAL) which price shall include all labor, equipment, and materials necessary to perform said work.

Filling Valve Vaults

Where valve vaults are shown to be filled on the Plans, the Contractor shall remove the cone of the valve vault, remove the existing valve, cap the existing watermain, place concrete thrust blocks between the end of the watermain and the inside wall of the structure, and fill the remaining structure with FA-6 material, compacted to the satisfaction of the Engineer.

Basis of Payment. This work will be measured and paid for at the contract unit price each for FILLING VALVE VAULTS, which price shall be payment in full for performing all the work described herein, including the concrete thrust blocking and the FA-6 material.

Permanent Survey Markers

All section, quarter section or other government established corners which are discovered or known to exist within the limits of the proposed improvement are to be re-established. The Contractor shall obtain the Engineer's approval of the proposed monument to be used prior to starting the work.

The Engineer, after the final surface course has been placed, will install four PK nails for each point to be monumented.

1. At each location there are four PK nails in the surface. Each nail is one foot (0.3 m) from the center and in direct line with an opposite nail to be used for setting the new monument.
2. By the use of a drilling machine mounted with a 4 or 6 inch (100 or 150 mm) diamond core bit, center the core bit within the four PK nails.
3. Cut a hole in the pavement 4 or 6 inches (100 or 150 mm) in diameter by 4 inches (100 mm) deep. Remove the core and existing monument (if any) and discard it.
4. Fill the hole with two-component epoxy adhesive meeting all requirements of the ASTM Specification C881, Type IV, Grade 3 if temperature is at or above 50 degrees F (10 degrees C) or AASHTO Specification M237-90, Table 2 Type III for the two component, epoxy adhesive if the temperature is between 31 degrees F (-0.56 degrees C) and 50 degrees F (10 degrees C) with the approval by the Engineer before installation.
5. Place a new monument in the center of the hole. Set the monument so that the legend tip is 3/8 inch (10 mm) below the pavement surface.
6. By using the four PK nails and a string line or 1/8 inch (3 mm) chalk line, center the monument in the hole to the nearest 0.005 foot (0.002 meters). This can be accomplished by drawing the string across two diagonally opposite PK nails.
7. Using a line level, check the monument to make sure it is level.
8. When the hole around the monument is filled to capacity, recheck the monument with string and level in accordance with instructions 6 and 7.
9. Each monument shall be protected from traffic for a minimum of 90 minutes.

This work will be paid for at the contract unit price each for PERMANENT SURVEY MARKER, which shall include all work and materials to complete the installation.

Sign Panel, Type 1 (Special)

Description. This work shall conform to Section 720 of the "Standard Specifications" with the following modifications:

The sign panel sheeting shall be 3M Diamond Grade DG3 sheeting or approved equal.

A detail sheet for the Mast Arm Mounted Street Name signs has been included in the plans for reference. The Contractor shall be responsible to have the signs designed with the Clearview Highway font, rather than the font shown on the detail. The Contractor shall obtain approval from the Resident Engineer of the proposed font size and sign size prior to fabricating the signs.

Basis of Payment. This work will be paid for at the contract unit price per square foot for SIGN PANEL (SPECIAL) of the type specified, which shall include all labor (including design of the sign), equipment, and materials necessary to perform said work.

Type 1

Ground Rod

Effective: January 1, 2002

Description. This item shall consist of furnishing, installing and connecting ground rods for the grounding of service neutral conductors and for supplementing the equipment grounding system via connection at poles or other equipment throughout the system. All materials and work shall be in accordance with Article 250 of the NEC.

Materials. Materials shall be according to the following Articles of Section 1000 - Materials

Item	Article/Section
(a) Ground Rod.....	1087.01(b)
(b) Copper Ground Wire.....	1087.01(a)
(c) Access Well.....	1087.01(c)

CONSTRUCTION REQUIREMENTS

General. All connections to ground rods, structural steel or fencing shall be made with exothermic welds. Where such connections are made to insulated conductors, the connection shall be wrapped with at least 4 layers of electrical tape extended 152.4 mm (six inches) onto the conductor insulation.

Ground rods shall be driven so that the tops of the rod are 609.6 mm (24 inches) below finished grade. Where indicated, ground wells shall be included to permit access to the rod connections.

Where indicated, ground rods shall be installed through concrete foundations.

Where ground conditions, such as rock, preclude the installation of the ground rod, the ground rod may be deleted with the approval of the Engineer.

Where a ground field of "made" electrodes is provided, such as at control cabinets, the exact locations of the rods shall be documented by dimensioned drawings as part of the Record Drawings.

Ground rod connection shall be made by exothermic welds. Ground wire for connection to foundation steel or as otherwise indicated shall be stranded uncoated bare copper in accordance the applicable requirements of ASTM Designation B-3 and ASTM Designation B-8 and shall be included in this item. Unless otherwise indicated, the wire shall not be less than No. 2 AWG.

Where connections are made to epoxy coated reinforcing steel, the epoxy coating shall be sufficiently removed to facilitate the exothermic weld.

Method Of Measurement. Ground rods shall be counted, each. Ground wires and connection of ground rods at poles shall be included in this pay item.

Basis Of Payment. This item will not be paid for separately but shall be included in the pay item RELOCATE EXISTING LIGHTING UNIT, which shall include all material, labor, equipment and work described herein. If additional rods are needed, their installation and testing will be paid for according to Article 109.04

Relocate Existing Lighting Unit

This work shall consist of removing an existing lighting unit, consisting of but not limited to mast arm, pole, luminaire and metal foundation and reinstalling the lighting unit on the relocated metal foundation in the location as indicated in the plans or as designated by the Engineer in accordance to Section 844 of the Standard Specifications.

The lighting unit to be relocated under this item shall be checked during the Preconstruction Inspection for complete circuit identification. Any damage to the lighting unit or pole sustained during removal operations shall be repaired, or replaced in kind, to the satisfaction of the Engineer at the Contractor's own expense. The existing metal foundation and unit duct of the pole to be relocated will be reused for the relocated lighting unit. The relocated unit duct cable splicing will be performed in the relocated lighting unit handhole. Existing lighting shall be maintained and kept operational the same evening of the relocation without interruption.

Basis of Payment. This item will be paid for at the contract unit price per each for RELOCATE EXISTING LIGHTING UNIT, which will be payment in full for all labor and equipment necessary to perform the work in accordance with the Standard Specifications, the plan document and as specified herein. This work includes relocating the existing metal foundation, unit duct, cable splicing and all labor and materials including a ground rod to complete the relocation and make the lighting unit operational.

Aggregate Subgrade, 12"

Effective: May 1, 1990

Revised: January 1, 2007

This work shall be done in accordance with the applicable portions of Section 207. The material shall conform to Article 1004.04 except as follows:

1. Crushed Stone, Crushed Blast Furnace Slag, and Crushed Concrete will be permitted. Steel slag and other expansive materials as determined through testing by the Department will not be permitted.

<u>Sieve Size</u>	<u>Percent Passing</u>
6 in. (150 mm)	97 ± 3
4 in. (100 mm)	90 ± 10
2 in. (50 mm)	45 ± 25
No. 200 (75 µm)	5 ± 5

2. Gravel, Crushed Gravel, and Pit Run Gravel

<u>Sieve Size</u>	<u>Percent Passing</u>
6 in. (150 mm)	97 ± 3
4 in. (100 mm)	90 ± 10
2 in. (50 mm)	55 ± 25
No. 4 (4.75 mm)	30 ± 20
No. 200 (75 µm)	5 ± 5

3. Crushed Concrete with Bituminous Materials**

<u>Sieve Size</u>	<u>Percent Passing</u>
6 in. (150 mm)	97 ± 3
4 in. (100 mm)	90 ± 10
2 in. (50 mm)	45 ± 25
No. 4 (4.75 mm)	20 ± 20
No. 200 (75 µm)	5 ± 5

**The Bituminous material shall be separated and mechanically blended with the crushed concrete so that the bituminous material does not exceed 40% of the final products. The top size of the bituminous material in the final product shall be less than 4 inches (100 mm) and shall not contain more than 10.0% steel slag RAP or any material that is considered expansive by the Department.

The Aggregate subgrade shall be placed in two lifts consisting of a 9 inch (225 mm) and variable nominal thickness lower lift and a 3 inch (75 mm) nominal thickness top lift of capping aggregate having a gradation of CA 6. The CA 6 may be blended as follows. The bituminous materials shall be separated and mechanically blended with interlocking feeders with crushed concrete or natural aggregate, in a manner that the bituminous material does not exceed 40% of the final product. This process shall be approved by the engineer prior to start of production. The top side of the bituminous material in the final products shall be less than 1 ½ inches (37.5 mm) and shall not contain any material considered expansive by the department. Reclaimed Asphalt Pavement (RAP) (having a maximum of 10% steel slag RAP) meeting the requirements of Article 1004.07 and having 100% passing the 3 inch (75 mm) sieve and well graded down through fines may also be used as capping aggregate. IDOT testing of the RAP material will be used in determining the percent of steel slag or Expansive Material. When the contract specifies that an aggregate subbase is to be placed on the Aggregate Subgrade, the 3 inches (75 mm) of capping aggregate will be eliminated. A vibratory roller meeting the requirements of Article 1101.01(g) shall be used to roll each lift of material to obtain the desired keying or interlock and necessary compaction. The Engineer will verify that adequate keying has been obtained.

When a recommended remedial treatment for unstable subgrades is included in the contract, the lower lift of Aggregate Subgrade may be placed simultaneously with the material for Porous Granular Embankment, Subgrade when the total thickness to be placed is 2 feet (600 mm) or less.

Method of Measurement.

Contract Quantities. Contract quantities shall be in accordance with Article 202.07.

Measured Quantities. Aggregate subgrade will be measured in place and the area computed in square yards (square meters).

Basis of Payment. This work will be paid for at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE, 12".

Sediment Control, Drainage Structure Inlet Filter Cleaning

Description. This work shall consist of cleaning sediment from each assembled inlet filter. The Engineer will designate the need for cleaning based on the rate of debris and silt collected at each inlet filter location.

Cleaning of the inlet filter shall consist of inspecting and cleaning (includes removal and proper disposal of debris and silt that has accumulated in the filter fabric bag) by vactoring, removing and dumping or any other method approved by the Engineer.

Method of Measurement. Cleaning of the drainage structure inlet filter shall be measured for payment each time that the cleaning work is performed at each of the drainage structure inlet filter locations.

Basis of Payment. The work will be paid for at the contract unit price per each for SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING, which price shall include all costs for labor, materials, equipment, and incidentals necessary to perform the work.

Bituminous Bike Path Removal

Description. This work shall consist of the removal and disposal of the existing bituminous bike path as directed by the Engineer. This work shall be performed in accordance with Section 440 of the Standard Specifications.

Method of Measurement. Bituminous bike path removal will be measured for payment in place and the area computed in square yards.

Basis of Payment. This work will be paid for at the contract unit price per square yard for BITUMINOUS BIKE PATH REMOVAL regardless of the depth of existing material.

Connection to Existing Water Main (Non-Pressure) – 12”

Description. This work shall consist of the connection of new water main to existing water main shall be performed in accordance with applicable portions of Section 41 of the Water and Sewer Specifications with the following clarifications.

Materials. Water main and fittings shall conform to the special provisions for “Ductile Iron Water Main” included herein.

Construction Requirements. New water main shall be connected to existing water main after the new main has passed hydrostatic testing and disinfection. Connections shall be accomplished by the use of mechanical joint fittings and lengths of pipe to make the most direct vertical and horizontal adjustments necessary to complete the connection. This may include cut-ins to the existing main or connections to existing valves or fittings. This work will require water to be shut off, which shall be coordinated with

the Village's water department personnel. The inside surface of all new materials (including but not limited to pipe and fittings) shall be cleaned of all foreign materials and swabbed with a solution of efficient bactericide before assembly.

Basis of Payment. This work will be measured and paid for at the contract unit price per each for CONNECTION TO EXISTING WATER MAINS (NON-PRESSURE) of the size specified which price shall include all labor, equipment, ductile iron pipe water main (up to 15 linear feet), water main fittings, polyethylene wrapping, disinfection, testing, backfill and thrust blocking required to make the connection. If the quantity allowance for ductile iron water main is exceeded, quantities in excess of the allowance will be paid for under the items for DUCTILE IRON WATER MAIN.

Structure to be Abandoned

Description. This work shall consist of the abandonment of an existing manhole in accordance with Section 602 of the Standard Specifications with the following clarifications:

Construction Requirements. The existing frame and lid and cone section of the existing manhole shall be removed. Additional barrel sections shall be removed until the top of the structure is at least 4 feet below the proposed grade. A new precast reinforced concrete flat slab top shall be placed on the structure. The slab shall be in accordance with Highway Standard 602601-01 except that there shall NOT be an access hole on top. The slab shall be sealed with external sealing bands, preformed flexible joints sealant, or mastic joint sealer. When mastic joint sealer is used, the material shall completely fill the joint after the units have been brought together. The Contractor shall backfill the excavation with Trench Backfill to the proposed subgrade elevation. The frame and lid shall be returned to the Village of Huntley's Public Works facility. The cone and barrel sections shall be disposed of by the Contractor.

Basis of Payment. This work will be measured and paid for at the contract unit price per each for STRUCTURE TO BE ABANDONED which price shall include all labor, equipment, material including trench backfill, required to abandon the existing structure.

Storm Sewers

Description. This work shall consist of the installation of storm sewer in accordance with Section 550 of the Standard Specifications with the following clarifications:

Materials. All storm sewers shall be reinforced concrete pipe conforming to ASTM C76 minimum Class III with O-ring joints conforming to ASTM C443.

Basis of Payment. This work shall be measured and paid for at the contract unit price per foot for STORM SEWERS of the class, type and diameter specified which price shall include all labor, equipment and materials necessary to complete this work.

TRAFFIC SIGNAL SPECIFICATIONS

Effective: January 1, 2002

Revised: January 12, 2007

These Traffic Signal Special Provisions and the "District 1 Standard Traffic Signal Design Details" supplement the requirements of the State of Illinois "Standard Specifications for Road and Bridge Construction." The intent of these Special Provisions is to prescribe the materials and construction methods commonly used for traffic signal installations. All material furnished shall be new. The locations and the details of all installations shall be as indicated on the Plans or as directed by the Engineer. The work to be done under this contract consists of furnishing and installing all traffic signal work as specified in the Plans and as specified herein in a manner acceptable and approved by the Engineer.

SECTION 720 SIGNING

MAST ARM SIGN PANELS.

Add the following to Section 720.02 of the Standard Specifications:

Signs attached to poles or posts (such as mast arm signs) shall have mounting brackets and sign channels which are equal to and completely interchangeable with those used by the McHenry County Sign Shop. Signfix Aluminum Channel Framing System is currently recommended, but other brands of mounting hardware are acceptable based upon the Department's approval.

DIVISION 800 ELECTRICAL

INSPECTION OF ELECTRICAL SYSTEMS.

Add the following to Section 801.10 of the Standard Specifications:

All cabinets including temporary traffic signal cabinets shall be assembled by an approved equipment supplier in District One. The Department reserves the right to request any controller and cabinet to be tested at the equipment supplier facilities prior to field installation, at no extra cost to this contract. All railroad interconnected (including temporary railroad interconnect) controllers and cabinets shall be newly constructed, built, tested and approved by the controller equipment vendor, in the vendor's District One facility, prior to field installation. The vendor shall provide the technical equipment and assistance as required by the Engineer to fully test this equipment.

DAMAGE TO TRAFFIC SIGNAL SYSTEM.

Revise Section 801.12(b) of the Standard Specifications to read:

Any damaged equipment or equipment not operating properly from any cause whatsoever shall be repaired with new equipment provided by the Contractor at no additional cost to the Contract and or owner of the traffic signal system, all as approved by the Engineer. Final repairs or replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted. Cable splices outside the controller cabinet shall not be allowed.

RESTORATION OF WORK AREA.

Add to Section 801 of the Standard Specifications:

Restoration of the traffic signal work area shall be included in the related pay items such as foundation, conduit, handhole, trench and backfill, etc. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be replaced in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded. Restoration of the work area shall be incidental to the contract without any extra compensation allowed to the Contractor.

SUBMITTALS.

Revise Section 801.05 of the Standard Specifications to read:

The Contractor shall provide:

- a. All material approval requests shall be submitted at the preconstruction meeting, including major traffic signal items listed in the table in Article 801.05.
- b. All material or equipment which are similar or identical shall be the product of the same manufacturer, unless necessary for system continuity. Traffic signal materials and equipment shall bear the U.L. label whenever such labeling is available.
- c. Seven (7) copies of a letter from the Traffic Signal Contractor on company letterhead listing the contract number or permit number, project location/limits, pay item description, pay code number, manufacturer's name and model numbers of the proposed equipment and stating that the proposed equipment meets all contract requirements. The letter will be reviewed by the Traffic Design Engineer to determine whether the equipment to be used is approvable.
- d. Seven (7) copies of shop drawings for mast arm poles and assemblies, including combination mast arm poles, are required. A minimum of two (2) copies of all other material catalog cuts are required. Submittals for equipment and materials shall be complete. Partial or incomplete submittals will be returned without review.
- e. Certain non-standard mast arm poles and assemblies will require additional review from IDOT's Central Office. Examples include ornamental/decorative and non-standard length mast arm pole assemblies. The Contractor shall account for the additional review time in his schedule.
- f. The contract number or permit number, project location/limits and corresponding pay code number must be on each sheet of the letter, material catalog cuts and mast arm poles and assemblies drawings.
- g. Where certifications and/or warranties are specified, the information submitted for approval shall include certifications and warranties. Certifications involving inspections, and/or tests of material shall be complete with all test data, dates, and times.
- h. After the Engineer reviews the submittals for conformance with the design concept of the project, the Engineer will stamp the drawings indicating their status as 'Approved', 'Approved-As-Noted', 'Disapproved', or 'Information Only'. Since the Engineer's review is for conformance with the design concept only, it is the Contractor's responsibility to coordinate the various items into a working system as specified. The Contractor shall not be relieved from responsibility for errors or omissions in the shop, working, layout drawings, or other documents by the Department's approval thereof. The Contractor must still be in full compliance with contract and specification requirements.
- i. All submitted items reviewed and marked 'APPROVED AS NOTED', or 'DISAPPROVED' are to be resubmitted in their entirety, unless otherwise indicated within the submittal comments, with a disposition of previous comments to verify contract compliance at no additional cost to the contract.
- j. Exceptions, Deviations and Substitutions. In general, exceptions to and deviations from the requirements of the Contract Documents will not be allowed. It is the Contractor's responsibility to note any deviations from Contract requirements at the time of submittal and to make any requests for deviations in writing to the Engineer. In general, substitutions will not be acceptable. Requests for substitutions must demonstrate that the proposed substitution is superior to the material or equipment required by the Contract Documents. No exceptions, deviations or substitutions will be permitted without the approval of the Engineer.

MAINTENANCE AND RESPONSIBILITY.

Revise Section 801.11 of the Standard Specifications to read:

- a) Existing traffic signal installations and/or any electrical facilities at all or various locations may be altered or reconstructed totally or partially as part of the work on this Contract. The Contractor is

hereby advised that all traffic control equipment, presently installed at these locations, may be the property of the State of Illinois, Department of Transportation, Division of Highways, County, Private Developer, or the Municipality in which they are located. Once the Contractor has begun any work on any portion of the project all traffic signals within the limits of this contract or those which have the item "Maintenance of Existing Traffic Signal Installation", "Temporary Traffic Signal Installation(s)" and/or "Maintenance of Existing Flashing Beacon Installation", shall become the full responsibility of the Contractor. The Contractor shall supply the engineer and the Department's Electrical Maintenance Contractor a 24-hour emergency contact name and telephone number.

- b) When the project has a pay item for "Maintenance of Existing Traffic Signal Installation", "Temporary Traffic Signal Installation(s)" and/or "Maintenance of Existing Flashing Beacon Installation", the Contractor must notify both the Area Traffic Signal Maintenance and Operations Engineer at (815) 334-4960 and the Department's Electrical Maintenance Contractor, of their intent to begin any physical construction work on the Contract or any portion thereof. This notification must be made a minimum of seven (7) working days prior to the start of construction to allow sufficient time for inspection of the existing traffic signal installation(s) and transfer of maintenance to the Contractor. If work is started prior to an inspection, maintenance of the traffic signal installation(s) will be transferred to the Contractor without an inspection. The Contractor will become responsible for repairing or replacing all equipment that is not operating properly or is damaged at no cost to the owner of the traffic signal. Final repairs or replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted.
- c) Contracts such as pavement grinding or patching which result in the destruction of traffic signal loops do not require maintenance transfer, but require a notification of intent to work and an inspection. A minimum of seven (7) working days prior to the loop removal, the Contractor shall notify the Area Traffic Signal Maintenance and Operations Engineer at (815) 334-4960 and the Department's Electrical Maintenance Contractor, at which time arrangements will be made to adjust the traffic controller timing to compensate for the absence of detection. See additional requirements in these specifications under Inductive Loop Detector.
- d) The Contractor is advised that the existing and/or temporary traffic signal installation must remain in operation during all construction stages, except for the most essential down time. Any shutdown of the traffic signal installation, which exceeds fifteen (15) minutes, must have prior approval of the Engineer. Approval to shutdown the traffic signal installation will only be granted during the period extending from 10:00 a.m. to 3:00 p.m. on weekdays. Shutdowns shall not be allowed during inclement weather or holiday periods.
- e) The Contractor shall be fully responsible for the safe and efficient operation of the traffic signals. Any inquiry, complaint or request by the Department, the Department's Electrical Maintenance Contractor or the public, shall be investigated and repairs begun within one hour. Failure to provide this service will result in liquidated damages of \$500 per day per occurrence. In addition, the Department reserves the right to assign any work not completed within this timeframe to the Electrical Maintenance Contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor. Failure to pay these costs to the Electrical Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. The Department's Electrical Maintenance Contractor may inspect any signaling device on the Department's highway system at any time without notification.

TRAFFIC SIGNAL INSPECTION (TURN-ON).

Revise Section 801.15(b) of the Standard Specifications to read:

It is the intent to have all electric work completed and equipment field tested by the vendor prior to the Department's "turn-on" field inspection. If in the event the Engineer determines work is not complete and the inspection will require more than two (2) hours to complete, the inspection shall be canceled and the Contractor will be required to reschedule at another date. The maintenance of the traffic signals will not be accepted until all punch list work is corrected and re-inspected.

When the road is open to traffic, except as otherwise provided in Section 850 of the Standard Specifications, the Contractor may request a turn-on and inspection of the completed traffic signal installation at each separate location. This request must be made to the Area Traffic Signal Maintenance and Operations Engineer at (815) 334-4960 a minimum of seven (7) working days prior to the time of the requested inspection. The Department will not grant a field inspection until notification is provided from the Contractor that the equipment has been field tested and the intersection is operating according to Contract requirements. The Department's facsimile number is (815) 334-4989. The Contractor must invite local fire department personnel to the turn-on when Emergency Vehicle Preemption (EVP) is included in the project. The Contractor must notify the SCAT Consultant of the turn-on schedule, as well as stage changes and phase changes during construction.

The Contractor must have all traffic signal work completed and the electrical service installation connected by the utility company prior to requesting an inspection and turn-on of the traffic signal installation. The Contractor shall be responsible to provide a police officer to direct traffic at the time of testing.

The Contractor shall provide a representative from the control equipment vendor's office to attend the traffic signal inspection for both permanent and temporary traffic signal turn-ons. Upon demonstration that the signals are operating and all work is completed in accordance with the Contract and to the satisfaction of the Engineer, the Engineer will then allow the signals to be placed in continuous operation. The Agency that is responsible for the maintenance of each traffic signal installation will assume the maintenance upon successful completion of this inspection.

The Department requires the following from the Contractor at traffic signal turn-ons.

1. One set of signal plans of record with field revisions marked in red ink.
2. Notification from the Contractor and the equipment vendor of satisfactory field testing.
3. A knowledgeable representative of the controller equipment supplier shall be required at the traffic signal turn-on. The representative shall be knowledgeable of the cabinet design and controller functions.
4. A copy of the approved material letter.
5. One (1) copy of the operation and service manuals of the signal controller and associated control equipment.
6. Five (5) copies (280 mm X 430 mm) 11" x 17" of the cabinet wiring diagrams.
7. The controller manufacturer shall provide a printer at the turn-on to supply a printed form, not to exceed (280 mm X 430 mm) 11" x 17" for recording the traffic signal controller's timings; backup timings; coordination splits, offsets, and cycles; TBC Time of Day, Week and Year Programs; Traffic Responsive Program, Detector Phase Assignment, Type and Detector Switching; and any other functions programmable from the keyboard. The form shall include a location, date, manufacturer's name, controller model and software version. The form shall be approved by the Engineer and a minimum of three (3) copies must be furnished at each turn-on. The manufacturer must provide all programming information used within the controller at the time of turn-on.

Acceptance of the traffic signal equipment by the Department shall be based upon inspection results at the traffic signal "turn on." If approved, traffic signal acceptance shall be verbal at the "turn on" inspection followed by written correspondence from the Engineer. The Contractor shall be responsible for all traffic signal equipment and associated maintenance thereof until Departmental acceptance is granted.

All equipment and/or parts to keep the traffic signal installation operating shall be furnished by the Contractor. No spare traffic signal equipment is available from the Department.

All punch list work shall be completed within two (2) weeks after the final inspection. The Contractor shall notify the Electrical Maintenance Contractor to inspect all punch list work. Failure to meet these time constraints shall result in liquidated damage charges of \$500 per month per incident.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid prices, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements shall be subject to removal and disposal at the Contractor's expense.

LOCATING UNDERGROUND FACILITIES.

Revise Section 803.00 to the Standard Specifications to read:

If this Contract requires the services of an Electrical Contractor, the Contractor shall be responsible at his/her own expense for locating existing MCDOT electrical facilities prior to performing any work. If this Contract does not require the services of an Electrical Contractor, the Contractor may request one free locate for existing MCDOT electrical facilities from the Department's Electrical Maintenance Contractor prior to the start of any work. Additional requests may be at the expense of the Contractor. The location of underground traffic facilities does not relieve the Contractor of their responsibility to repair any facilities damaged during construction at their expense.

The exact location of all utilities shall be field verified by the Contractor before the installation of any components of the traffic signal system. For locations of utilities the local Counties or Municipalities may need to be contacted, in the City of Chicago contact D.I.G.G.E.R. at (312) 744-7000 and for all other locations contact J.U.L.I.E. at 1-800-892-0123.

ELECTRIC SERVICE INSTALLATION.

Revise Section 805.00 of the Standard Specifications to read:

Description. This work shall consist of all materials and labor required to install, modify, or extend the electric service installation. All installations shall meet the requirements of the details in the "District 1 Standard Traffic Signal Design Details" and applicable portions of the Specifications.

General. The electric service installation shall be the electric service disconnecting means and it shall be identified as suitable for use as service equipment.

The electric utility contact information is noted on the plans and represents the current information at the time of contract preparation. The Contractor must request in writing for service and/or service modification within 10 days of contract award and must follow-up with the electric utility to assure all necessary documents and payment are received by the utility. The Contractor shall forward copies of all correspondence between the contractor and utility company. The service agreement and sketch shall be submitted for signature to the Traffic Program's engineer.

Materials.

- a. General. The completed control panel shall be constructed in accordance with UL Std. 508A, Industrial Control Panel, and carry the UL label. Wire terminations shall be UL listed.
- b. Enclosures.
 1. Pole Mounted Cabinet. The cabinet shall be UL 50, NEMA Type 4X, unfinished single door design, fabricated from minimum 2.03 mm (0.080-inch) thick Type 5052 H-32 aluminum. Seams shall be continuous welded and ground smooth. Stainless steel screws and clamps shall secure the cover and assure a watertight seal. The

cover shall be removable by pulling the continuous stainless steel hinge pin. The cabinet shall have an oil-resistant gasket and a lock kit shall be provided with an internal O-ring in the locking mechanism assuring a watertight and dust-tight seal. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 350 mm (14-inches) high, 225 mm (9-inches) wide and 200 mm (8-inches) in depth is required. The cabinet shall be channel mounted to a wooden utility pole using assemblies recommended by the manufacturer.

2. **Ground Mounted Cabinet.** The cabinet shall be UL 50, NEMA Type 3R unfinished single door design with back panel. The cabinet shall be fabricated from Type 5052 H-32 aluminum with the frame and door 3.175 mm (0.125-inch) thick, the top 6.350 mm (0.250-inch) thick and the bottom 12.70 mm (0.500-inch) thick. Seams shall be continuous welded and ground smooth. The door and door opening shall be double flanged. The door shall be approximately 80% of the front surface, with a full length tamperproof stainless steel 1.91 mm (.075-inch) thick hinge bolted to the cabinet with stainless steel carriage bolts and nylocks nuts. The locking mechanism shall be slam-latch type with a keyhole cover. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 1000 mm (40-inches high), 400 mm (16-inches) wide and 375 mm (15-inches) in depth is required. The cabinet shall be mounted upon a square Type A concrete foundation as indicated on the plans. The foundation is paid for separately.
- c. **Surge Protector.** Overvoltage protection, with LED indicator, shall be provided for the 120 volt load circuit by the means MOV and thermal fusing technology. The response time shall be <math>< 5n</math> seconds and operate within a range of -40C to +85C. The surge protector shall be UL 1449 Listed.
- d. **Circuit Breakers.** Circuit breakers shall be standard UL listed molded case, thermal-magnetic bolt-on type circuit breakers with trip free indicating handles. 120 volt circuit breakers shall have an interrupting rating of not less than 65,000 rms symmetrical amperes. Unless otherwise indicated, the main disconnect circuit breaker for the traffic signal controller shall be rated 60 amperes, otherwise noted on the plans, 120 V and the auxiliary circuit breakers shall be rated 10 amperes, 120 V.
- e. **Fuses, Fuseholders and Power Indicating Light.** Fuses shall be small-dimensional cylindrical fuses of the dual element time-delay type. The fuses shall be rated for 600 V AC and shall have a UL listed interrupting rating of not less than 10,000 rms symmetrical amperes at rated voltage. The power indicating light shall be LED type with a green colored lens and shall be energized when electric utility power is present.
- f. **Ground and Neutral Bus Bars.** A single copper ground and neutral bus bar, mounted on the equipment panel shall be provided. Ground and neutral conductors shall be separated on the bus bar. Compression lugs, plus 2 spare lugs, shall be sized to accommodate the cables with the heads of the connector screws painted green for ground connections and white for neutral connections.
- g. **Utility Services Connection.** The Contractor shall notify the Utility Company marketing representative a minimum of 30 working days prior to the anticipated date of hook-up. This 30 day advance notification will begin only after the Utility Company marketing representative has received service charge payments from the Contractor. Prior to contacting the Utility Company marketing representative for service connection, the service installation controller cabinet and cable must be installed for inspection by the Utility Company.

- h. Ground Rod. Ground rods shall be copper-clad steel, a minimum of 3.0 meters (10') in length, and 20mm (3/4") in diameter. Ground rod resistance measurements to ground shall be 25 ohms or less. If necessary additional rods shall be installed to meet resistance requirements at no additional cost to the contract.

Installation

- a. General. The Contractor shall confirm the orientation of the traffic service installation and its door side with the engineer, prior to installation. All conduit entrances into the service installation shall be sealed with a pliable waterproof material.
- b. Pole Mounted. Brackets designed for pole mounting shall be used. All mounting hardware shall be stainless steel. Mounting height shall be as noted on the plans or as directed by the Engineer.
- c. Ground Mounted. The service installation shall be mounted plumb and level on the foundation and fastened to the anchor bolts with hot-dipped galvanized or stainless steel nuts and washers. The space between the bottom of the enclosure and the top of the foundation shall be caulked at the base with silicone.

Basis of Payment. The service installation shall be paid for at the contract unit price each for SERVICE INSTALLATION of the type specified which shall be payment in full for furnishing and installing the service installation complete. The type A foundation, which includes the ground rod shall be paid for separately. SERVICE INSTALLATION, POLE MOUNTED shall include the 20mm (3/4") grounding conduit, ground rod, and pole mount assembly. Any changes by the utility companies shall be approved by the engineer and paid for as an addition to the contract according to Article 109.05 of the Standard Specifications.

GROUNDING OF TRAFFIC SIGNAL SYSTEMS.

General. All traffic signal systems, equipment and appurtenances shall be properly grounded in strict conformance with the NEC. See IDOT District 1 Traffic Signal detail plan sheet for additional information.

The grounding electrode system shall include a ground rod installed with each traffic signal controller concrete foundation and all mast arm and post concrete foundations. An additional ground rod will be required at locations where measured resistance exceeds 25 ohms. Ground rods are included in the applicable foundation paid item and will not be paid for separately.

Testing shall be according to Section 801.13(a) (4) and (5).

- a) The grounded conductor (neutral conductor) shall be white color coded. This conductor shall be bonded to the equipment grounding conductor only at the Electric Service Installation. All power cables shall include one neutral conductor of the same size.
- b) The equipment grounding conductor shall be green color coded. The following is in addition to Section 801.04 of the Standard Specifications.
- 1) Equipment grounding conductors shall be XLP insulated No. 6, unless otherwise noted on the plans, and bonded to the grounded conductor (neutral conductor) only at the Electric Service Installation. The equipment grounding conductor is paid for separately and shall be continuous. The Earth shall not be used as the equipment grounding conductor.
 - 2) Equipment grounding conductors shall be bonded, using a Listed grounding connector, to all traffic signal mast arm poles, traffic signal posts, pedestrian posts, pull boxes, handhole frames and covers and other metallic enclosures throughout the traffic signal wiring system, except where noted

herein. A Listed electrical joint compound shall be applied to all conductor terminations, connector threads and contact points.

- 3) All metallic and non-metallic raceways containing traffic signal circuit runs shall have a continuous equipment grounding conductor, except raceways containing only detector loop lead-in circuits, circuits under 50 volts and/or fiber optic cable will not be required to include an equipment grounding conductor.
 - 4) Individual conductor splices in handholes shall be soldered and sealed with heat shrink. When necessary to maintain effective equipment grounding, a full cable heat shrink shall be provided over individual conductor heat shrinks.
- c) The grounding electrode conductor shall be similar to the equipment grounding conductor in color coding (green) and size. The grounding electrode conductor is used to connect the ground rod to the equipment grounding conductor and is bonded to ground rods via exothermic welding, listed pressure connectors, listed clamps or other approved listed means.

HANDHOLES.

Add the following to Section 814.00 of the Standard Specifications:

All handholes shall be concrete, poured in place, with inside dimensions of 549 mm (21-1/2") minimum. Frames and lid openings shall match this dimension. The cover of the handhole frame shall be labeled "Traffic Signals" with legible raised letters.

For grounding purposes the handhole frame shall have provisions for a 15.875 mm (7/16") diameter stainless bolt cast into one corner of the frame. The covers shall have a stainless steel threaded stint extended from the eye hook assembly for the purpose of attaching the grounding conductor to the handhole frame.

The minimum wall thickness for heavy duty hand holes shall be 300 mm (12 inches).

All conduits shall enter the handhole at a depth of (760 mm) 30" except for the conduits for detector loops when the handhole is less than (1.52 m) 5' from the detector loop. All conduit ends should be sealed with a waterproof sealant to prevent the entrance of contaminants into the handhole.

Steel cable hooks shall be coated with hot-dipped galvanization in accordance with AASHTO Specification M111. Hooks shall be a minimum of 1/2 inch (12.7 mm) diameter with two 90 degree bends and extend into the handhole at least 6 inches (150 mm). Hooks shall be placed a minimum of 12 inches (300 mm) below the lid or lower if additional space is required.

FIBER OPTIC TRACER CABLE.

The cable shall meet the requirements of Section 817 of the "Standard Specifications," except for the following:

Add to Section 817.03 of the Standard Specifications:

In order to trace the fiber optic cable after installation, the tracer cable shall be installed in the same conduit as the fiber optic cable. The tracer cable shall be continuous, extended into the controller cabinet and terminated on a terminal strip mounted on the side wall of the controller cabinet. The terminal strip and tracer cable shall be clearly marked and identified. The tracer cable will be allowed to be spliced at the handholes only. All tracer cable splices shall be kept to a minimum and shall incorporate maximum lengths of cable supplied by the manufacturer. The tracer cable splice shall use a Western Union Splice soldered with resin core flux. All exposed surfaces of the solder shall be smooth. Splices shall be soldered using a soldering iron. Blow torches or other devices which oxidize copper cable shall not be

allowed for soldering operations. The splice shall be covered with WCSMW 30/100 heat shrink tube, minimum length (100 mm) 4" and with a minimum (25 mm) 1" coverage over the XLP insulation, underwater grade.

Revise Section 817.05 of the Standard Specifications to read:

Basis of Payment: The tracer cable shall be paid for separately as ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C per (meter) foot, which price shall include all associated labor and material for installation.

GROUNDING CABLE.

The cable shall meet the requirements of Section 817 of the "Standard Specifications," except for the following:

Add to Section 817.02 (b) of the Standard Specifications:

Unless otherwise noted on the Plans, traffic signal grounding conductor shall be one conductor, #6 gauge copper, with a XLP jacket.

The traffic signal grounding conductor shall be bonded, using a Listed grounding connector (Burndy type KC/K2C, as applicable, or approved equal), to all proposed and existing traffic signal mast arm poles and traffic/pedestrian signal posts, including push button posts. The grounding conductor shall be bonded to all proposed and existing pull boxes, handhole frames and covers and other metallic enclosures throughout the traffic signal wiring system and noted herein and detailed on the plans. Bonding to existing handhole frames and covers shall be paid for separately.

Revise Section 817.05 of the Standard Specifications to read:

Basis of Payment. Grounding cable shall be measured in place for payment in (meter) foot. Payment shall be at the contract unit price for ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C, which price includes all associated labor and material including grounding clamps, splicing, exothermic welds/other Listed connectors and hardware.

RAILROAD INTERCONNECT CABLE.

The cable shall meet the requirements of Section 817 of the "Standard Specifications," except for the following:

Add to Section 817.02 of the Standard Specifications:

The cable shall be three conductor standard #14 copper cable in a clear polyester binder, shielded with #36 AWG tinned copper braid with 85% coverage, and insulated with .016" polyethylene (black, blue, red). The jacket shall be black 0.045 PVC or polyethylene.

Revise Section 817.05 of the Standard Specifications to read:

Basis of Payment. This work shall be paid for at the contract unit price per (meter) foot for ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C, which price shall be payment in full for furnishing, installing, and making all electrical connections in the traffic signal controller cabinet. Connections in the railroad controller cabinet shall be performed by railroad personnel.

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

Revise Section 850.00 of the Standard Specifications to read:

The energy charges for the operation of the traffic signal installation shall be paid for by others. Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the Contract or any portion thereof.

The Contractor shall have on staff electricians with IMSA Level II certification to provide signal maintenance.

This item shall include maintenance of all traffic signal equipment at the intersection, including emergency vehicle pre-emption equipment, master controllers, uninterruptible power supply (UPS and batteries), telephone service installations, communication cables and conduits to adjacent intersections.

The maintenance shall be according to District 1 revised Article 801.11 and the following contained herein.

The Contractor shall check all controllers every two (2) weeks, which will include visually inspecting all timing intervals, relays, detectors, and pre-emption equipment to ensure that they are functioning properly. This item includes, as routine maintenance, all portions of emergency vehicle pre-emption equipment. The Contractor shall maintain in stock at all times a sufficient amount of materials and equipment to provide effective temporary and permanent repairs.

The Contractor shall provide immediate corrective action when any part or parts of the system fail to function properly. Two far side heads facing each approach shall be considered the minimum acceptable signal operation pending permanent repairs. When repairs at a signalized intersection require that the controller be disconnected, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash RED for all directions unless a different indication has been specified by the Engineer. The Contractor shall be required to place stop signs (R1-1-36) at each approach of the intersection as a temporary means of regulating traffic. At approaches where a yellow flashing indication is necessary, as directed by the Engineer, stop signs will not be required. The Contractor shall furnish and equip all their vehicles assigned to the maintenance of traffic signal installations with a sufficient number of stop signs as specified herein. The Contractor shall maintain a sufficient number of spare stop signs in stock at all times to replace stop signs which may be damaged or stolen.

The Contractor shall provide the Engineer with a 24 hour telephone number for the maintenance of the traffic signal installation and for emergency calls by the Engineer.

Traffic signal equipment, which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of these Specifications.

The Contractor shall respond to all emergency calls from the Department or others within one hour after notification and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the County. The Contractor may institute action to recover damages from a responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer cannot contact the Contractor's designated personnel, the Engineer shall have the County's Electrical Maintenance Contractor perform the maintenance work required. The County's Electrical Maintenance Contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill within thirty (30) days of the date of receipt of the invoice or the cost of such work will be deducted from the amount due the Contractor. The Contractor shall allow the Electrical Maintenance Contractor to make reviews of the Existing Traffic Signal Installation that has been transferred to the Contractor for Maintenance.

Basis of Payment. This work shall be paid for at the contract unit price each for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

TRAFFIC ACTUATED CONTROLLER.

Add the following to Section 857.02 of the Standard Specifications:

Controllers shall be NEMA TS2 Type 1 compatible, Econolite ASC3-2100 unless specified otherwise on the plans or elsewhere on these specifications. Only controllers supplied by one of the District 1 approved closed loop equipment manufacturers will be allowed. The controller shall be the most recent model and software version supplied by the manufacturer at the time of the approval. The traffic signal controller shall provide features to inhibit simultaneous display of a circular yellow ball and a yellow arrow display. Individual load switches shall be provided for each vehicle, pedestrian, and right turn over lap phase. The controller shall prevent phases from being skipped during program changes and after all preemption events.

MASTER CONTROLLER.

Revise Sections 860.02 - Materials and 860.03 - Installation of the Standard Specifications to read:

Only controllers supplied by one of the District approved closed loop equipment manufacturers will be allowed. Only NEMA TS 2 Type 1 Econolite closed loop systems shall be supplied. The latest model and software version of master controller shall be supplied.

Functional requirements in addition to those in section 863 of the Standard Specification include:

By December 31, 2002, the Master Controller shall provide a background timer which will prevent phases from being skipped during program changes.

The system commands shall consist of, as a minimum, six (6) cycle lengths, five (5) offsets, three (3) splits, and four (4) special functions. The system commands shall also include commands for free or coordinated operation.

Traffic Responsive operation shall consist of the real time acquisition of system detector data, data validation, and the scaling of acquired volumes and occupancies in a deterministic fashion so as to cause the selection and implementation of the most suitable traffic plan.

Upon request by the Engineer, each master shall be delivered with up to three (3) complete sets of the latest edition of registered remote monitoring software with full manufacture's support. Each set shall consist of software on CD, DVD, or other suitable media approved by the Engineer, and a bound set of manuals containing loading and operating instruction. One copy of the software and support data shall be delivered to the Agency in charge of system operation, if other than IDOT. One of these two sets will be provided to the Agency Signal Maintenance Contractor for use in monitoring the system.

The approved manufacturer of equipment shall loan the District one master controller and two intersection controllers of the most recent models and the newest software version to be used for instructional purposes in addition to the equipment to be supplied for the Contract.

The Contractor shall arrange to install a standard voice-grade dial-up telephone line to the master controller. This shall be accomplished through the following process utilizing District One staff. This telephone line may be coupled with a DSL line and a phone filter to isolate the dial-up line. An E911 address is required.

The cabinet shall be provided with an Outdoor Network Interface for termination of the telephone service. It shall be mounted to the inside of the cabinet in a location suitable to provide access for termination of the telephone service at a later date.

Full duplex communication between the master and its local controllers is recommended, but at this time not required. The data rate shall be 1200 baud minimum and shall be capable of speeds to 38,400 or above as technology allows. The controller, when installed in an Ethernet topology, may operate non-serial communications.

The master controller shall be furnished with a NEMA rated Econolite 56K industrial modem.

The cabinet shall be provided with a Siecor CAC 3000, or equivalent, Outdoor Network Interface for termination of the telephone service. It shall be mounted to the inside of the cabinet in a location suitable to provide access for termination of the telephone service at a later date. The CAC 3000 shall be equipped with a standard Three-Electrode Heavy Duty Gas Tube Surge Arrestor.

The cabinet shall provide a caller identification unit with 50 number memory.

The master controller shall be furnished with a NEMA rated Econolite 56K industrial modem.

Each master shall be delivered with up to three (3) complete sets of the latest edition of registered remote monitoring software with full manufacturer's support. Each set shall consist of software on suitable media (CD, 3 1/2" or 5 1/4" floppy disks as requested by the Engineer), and a bound set of manuals containing loading and operating instruction. One copy of the software and support data shall be delivered to the Agency in charge of system operation, if other than IDOT. One of these two sets will be provided to the Agency Signal Maintenance Contractor for his use in monitoring the system.

The Contractor shall be required to setup graphic displays and all software parameters for every intersection to be interconnected under this Contract, including complete viewing and control capabilities from IDOT remote monitor.

The approved manufacturer of equipment shall loan the District one master controller and two intersection controllers of the most recent models and the newest software version to be used for instructional purposes in addition to the equipment to be supplied for the Contract.

The Contractor shall arrange to install a standard voice-grade dial-up telephone line to the master controller. This shall be accomplished through the following process utilizing Department staff.

As soon as practical or within one week after the contract has been awarded, the Contractor shall contact (via phone) the Traffic Engineer at the McHenry County Division of Transportation at (815) 334-4960 to request a phone line installation.

A follow-up fax transmittal to the Traffic Engineer (815-334-4989) with all required information pertaining to the phone installation is required from the Contractor as soon as possible or within one week after the initial request has been made. The required information to be supplied on the fax shall include (but not limited to): A street address for the new traffic signal controller (or nearby address); a nearby existing telephone number; what type of telephone service is needed; the name and number of the Contractor's employee for the telephone company to contact regarding site work and questions.

The usual time frame for the activation of the phone line is 4-6 weeks after the MCDOT has received the Contractor supplied fax. It is, therefore, imperative that the phone line conduit and pull-string be installed by the Contractor in anticipation of this time frame. On jobs which include roadway widening in which the conduit cannot be installed until this widening is completed, the Contractor will be allowed to delay the phone line installation request to the Business Services Section until a point in time that is 4-6 weeks prior to the anticipated completion of the traffic signal work. The contractor shall provide the Administrative Support Manager with an expected installation date considering the 4-6 week processing time.

The telephone line shall be installed and activated one month before the system final inspection.

All costs associated with the telephone line installation and activation (not including the Contract specified conduit installation between the point of telephone service and the traffic signal controller cabinet) shall be paid for by the McHenry County Division of Transportation (i.e., this will be an MCDOT phone number not a Contractor phone number).

FIBER OPTIC CABLE.

Add the following to Articles 871.01, 872.02, 871.04, and 871.05 of the Standard Specifications:

This work shall consist of furnishing and installing Fiber Optical cable in conduit with all accessories and connectors according to Section 871 of the Standard Specifications. The cable shall be of the type, size, and the number of fiber specified.

The control cabinet distribution enclosure shall be CSC FTWO12KST-W/O 12 Port Fiber Wall Enclosure or an approved equivalent. The fiber optic cable shall provide six fibers per tube for the amount of fibers called for in the Fiber Optic Cable pay item in the Contract. A minimum of six multimode fibers from each cable shall be terminated with approved mechanical connectors at the distribution enclosure. Fibers not being used shall be labeled "spare." Fibers not attached to the distribution enclosure shall be capped and sealed. A minimum of 13.0 feet (4m) of extra cable length shall be provided for the controller cabinet. The controller cabinet extra cable length shall be stored as directed by the Engineer.

Fiber Optic cable may be gel filled or an approved water blocking tape.

Basis of Payment. The work shall be paid for at the contract unit price for FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F, per (meter) foot for the cable in place, including distribution enclosure and all connectors.

CONCRETE FOUNDATIONS.

Add the following to Section 878.03 of the Standard Specifications:

All anchor bolts shall be according to Section 1006.09, except all anchor bolts shall be hot dipped galvanized the full length of the anchor bolt including the hook.

Concrete Foundations, Type "A" for Traffic Signal Posts shall provide anchor bolts with the bolt pattern specified within the "District 1 Standard Traffic Signal Design Details." All Type "A" foundations shall be a minimum depth of 1.22 m (48").

Concrete Foundations, Type "C" for Traffic Signal Cabinets with Uninterruptible Power Supply (UPS) cabinet installations shall be a minimum of 48 inches (1.22 m) long and 31 inches (790 mm) wide. All Type "C" foundations shall be a minimum depth of 48 inches (1.22 m). An integral concrete pad to support the UPS cabinet shall be constructed a minimum of 20 inches (510 mm) long and a minimum depth of 10 inches (250 mm). The concrete apron in front of the Type IV or V cabinet shall be 36 in. x 48 in. x 5 in. (910 mm X 1220 mm X 130 mm). The concrete apron in front of the UPS cabinet shall be 36 in. x 31 in. x 5 in. (910 mm X 790 mm X 130 mm). Anchor bolts shall provide bolt spacing as required by the manufacturer.

Concrete Foundations, Type "D" for Traffic Signal Cabinets shall be a minimum of 48 inches (1.22 m) long and 31 inches (790 mm) wide. All Type "D" foundations shall be a minimum depth of 48 inches (1.22 m). The concrete apron shall be 36 in. x 48 in. x 5 in. (910 mm X 1220 mm X 130 mm). Anchor bolts shall provide bolt spacing as required by the manufacturer.

Concrete Foundations, Type "E" for Mast Arm and Combination Mast Arm Poles shall meet the following requirements:

Table 1
DESIGN TABLE FOR MAST ARM FOUNDATIONS

MAST ARM LENGTH	FOUNDATION DEPTH*	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF NO. 15 (NO. 5) BARS
Less than 9.1m (30')	10'-0" (3.0m)	30" (750mm)	24" (600mm)	8
Greater than or equal to 9.1m (30') and less than 12.2m (40')	13'-6" (4.1m)	30" (750mm)	24" (600mm)	8
	11'-0" (3.4m)	36" (900mm)	30" (750mm)	12
Greater than or equal to 12.2m (40') and less than 15.2m (50')	13'-0" (4.0m)	36" (900mm)	30" (750mm)	12
Greater than or equal to 15.2m (50') and up to 16.8m (55')	15'-0" (4.6m)	36" (900mm)	30" (750mm)	12

Foundation depths specified are for sites which have cohesive soils (clayey, silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive strength of $(Q_u) > 1.0$ tsf (100kPa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.

Concrete Foundations, Type "E" for Combination Mast Arm Poles shall be 36 inch (900 mm) diameter, regardless of mast arm length. Foundations used for Combination Mast Arm Poles shall provide an extra 2-1/2 inch (65 mm) raceway.

No foundation is to be poured until the Resident Engineer gives his/her approval as to the depth of the foundation.

DETECTOR LOOP.

Revise Section 886 of the Standard Specifications to read:

A minimum of seven (7) working days prior to the Contractor cutting loops, the Contractor shall have the proposed loop locations marked and contact the Area Traffic Signal Maintenance and Operations Engineer (815) 334-4960 to inspect and approve the layout. When preformed detector loops are installed, the Contractor shall have them inspected and approved prior to the pouring of the portland cement concrete surface, using the same notification process as above.

Loop detectors shall be installed according to the requirements of the "District 1 Standard Traffic Signal Design Details". Saw-cuts (homeruns on preformed detector loops) from the loop to the edge of pavement shall be made perpendicular to the edge of pavement when possible in order to minimize the length of the saw-cut (homerun on preformed detector loops) unless directed otherwise by the Engineer or as shown on the plan.

The detector loop cable insulation shall be labeled with the cable specifications.

Each loop detector lead-in wire shall be labeled in the handhole using a Panduit 250W175C water proof tag, or an approved equal, secured to each wire with nylon ties.

Resistance to ground shall be a minimum of 100 mega-ohms under any conditions of weather or moisture. Inductance shall be more than 50 and less than 700 microhenries. Quality readings shall be more than 5.

- (a) Type I. All loops installed in new asphalt pavement shall be installed in the binder course and not in the surface course. The edge of pavement, curb and handhole shall be cut with a 6.3 mm (1/4") deep x 100 mm (4") saw cut to mark location of each loop lead-in.

Loop sealant shall be a two-component thixotropic chemically cured polyurethane either Chemque Q-Seal 295, Percol Elastic Cement A/C Grade or an approved equal. The sealant shall be installed 3 mm (1/8") below the pavement surface, if installed above the surface the overlap shall be removed immediately.

Detector loop measurements shall include the saw cut and the length of the loop lead-in to the edge of pavement. The lead-in wire, including all necessary connections for proper operations, from the edge of pavement to the handhole, shall be incidental to the price of the detector loop. Unit duct, trench and backfill, and drilling of pavement or handholes shall be incidental to detector loop quantities.

- (b) Preformed. This work shall consist of furnishing and installing a rubberized heat resistant preformed traffic signal loop in accordance with the Standard Specifications, except for the following:

Preformed detector loops shall be installed in new pavement constructed of Portland cement concrete using mounting chairs or tied to re-bar or the preformed detector loops may be placed in the sub-base. Loop lead-ins shall be extended to a temporary enclosure near the proposed handhole location with ends capped and sealed against moisture and other contaminants.

Handholes shall be placed next to the shoulder or back of curb when preformed detector loops enter the handhole. Non-metallic coilable duct, included in this pay item, shall be used to protect the preformed lead-ins from back of curb to the handhole.

Preformed detector loops shall be factory assembled. Homeruns and interconnects shall be pre-wired and shall be an integral part of the loop assembly. The loop configurations and homerun lengths shall be assembled for the specific application. The loop and homerun shall be constructed using 17.2 mm (11/16") outside diameter (minimum), 9.5 mm (3/8") inside diameter (minimum) Class A oil resistant synthetic cord reinforced hydraulic hose with 1,720 kPa (250 psi) internal pressure rating. Hose for the loop and homerun assembly shall be one continuous piece. No joints or splices shall be allowed in the hose except where necessary to connect homeruns or interconnects to the loops. This will provide maximum wire protection and loop system strength. Hose tee connections shall be heavy duty high temperature synthetic rubber. The tee shall be of proper size to attach directly to the hose, minimizing glue joints. The tee shall have the same flexible properties as the hose to insure that the whole assembly can conform to pavement movement and shifting without cracking or breaking. The wire used shall be #16 THWN stranded copper. The number of turns in the loop shall be application specific. Homerun wire pairs shall be twisted a minimum of four turns per foot. No wire splices will be allowed in the preformed loop assembly. The loop and homeruns shall be filled and sealed with a flexible sealant to insure complete moisture blockage and further protect the wire.

Basis of Payment. This work shall be paid for at the contract unit price per meter (foot) for DETECTOR LOOP, TYPE I or PREFORMED DETECTOR LOOP as specified in the plans, which price shall be payment in full for furnishing and installing the detector loop and all related connections for proper operation.

EMERGENCY VEHICLE PRIORITY SYSTEM.

Revise Section 887.00 of the Standard Specifications to read:

It shall be the Contractor's responsibility to contact the municipality or fire district to verify the brand of emergency vehicle pre-emption equipment to be installed prior to the contract bidding. The equipment must be completely compatible with all components of the equipment currently in use by the Agency.

All new installations shall be equipped with Confirmation Beacons as shown on the "District One Standard Traffic Signal Design Details." The Confirmation Beacon shall consist of a 6 watt Par 38 LED flood lamp with a 30 degree light spread, maximum 6 watt energy consumption at 120V, and a 2,000 hour warranty for each direction of pre-emption. The lamp shall have an adjustable mount with a weatherproof enclosure for cable splicing. All hardware shall be cast aluminum or stainless steel. Holes drilled into signal poles, mast arms, or posts shall require rubber grommets. In order to maintain uniformity between communities, the confirmation beacons shall indicate when the control equipment receives the pre-emption signal. The pre-emption movement shall be signalized by a flashing indication at the rate specified by Section 4D-11 of the "Manual on Uniform Traffic Control Devices." The stopped pre-empted movements shall be signalized by a continuous indication.

All light operated systems shall operate at a uniform rate of 14.035 Hz \pm 0.002, or as otherwise required by the Engineer, and provide compatible operation with other light systems currently being operated in the District.

Basis of Payment. The work shall be paid for at the contract unit price each for furnishing and installing LIGHT DETECTOR and LIGHT DETECTOR AMPLIFIER. Furnishing and installing the confirmation beacon shall be incidental to the cost of the Light Detector. The preemption detector amplifier shall be paid for on a basis of (1) one each per intersection controller and shall provide operation for all movements required in the pre-emption phase sequence.

RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM

Description.

This work shall consist of re-optimizing a closed loop traffic signal system according to the following Levels of work.

LEVEL I applies when improvements are made to an existing signalized intersection within an existing closed loop traffic signal system. The purpose of this work is to integrate the improvements to the subject intersection into the signal system while minimizing the impacts to the existing system operation. This type of work would be commonly associated with the addition of signal phases, pedestrian phases, or improvements that do not affect the capacity at an intersection.

LEVEL II applies when improvements are made to an existing signalized intersection within an existing closed loop traffic signal system and detailed analysis of the intersection operation is desired by the engineer, or when a new signalized or existing signalized intersection is being added to an existing system, but optimization of the entire system is not required. The purpose of this work is to optimize the subject intersection, while integrating it into the existing signal system with limited impact to the system operations. This item also includes an evaluation of the overall system operation, including the traffic responsive program.

For the purposes of re-optimization work, an intersection shall include all traffic movements operated by the subject controller and cabinet.

After the signal improvements are completed, the signal shall be re-optimized as specified by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District One of the Illinois Department of Transportation. The Contractor shall contact the Traffic Signal Engineer at (815) 334-4960 for a listing of approved Consultants. Traffic signal system optimization work, including fine-tuning adjustments of the optimized system, shall follow the requirements stated in the most recent IDOT District 1 SCAT Guidelines, except as note herein.

A listing of existing signal equipment, interconnect information, phasing data, and timing patterns may be obtained from the Department, if available and as appropriate. The existing SCAT Report is available for review at the District One office and if the Consultant provides blank computer disks, copies of computer simulation files for the existing optimized system and a timing database that includes intersection displays will be made for the Consultant. The Consultant shall confer with the Traffic Signal Engineer prior to optimizing the system to determine if any extraordinary conditions exist that would affect traffic flows in the vicinity of the system, in which case, the Consultant may be instructed to wait until the conditions return to normal or to follow specific instructions regarding the optimization.

(a) LEVEL I Re-Optimization

1. The following tasks are associated with LEVEL I Re-Optimization.
 - a. Appropriate signal timings shall be developed for the subject intersection and existing timings shall be utilized for the rest of the intersections in the system.
 - b. Proposed signal timing plan for the new or modified intersection(s) shall be forwarded to IDOT for review prior to implementation.
 - c. Consultant shall conduct on-site implementation of the timings at the turn-on and make fine-tuning adjustments to the timings of the subject intersection in the field to alleviate observed adverse operating conditions and to enhance operations.
2. The following deliverables shall be provided for LEVEL I Re-Optimization.
 - a. Consultant shall furnish to IDOT a cover letter describing the extent of the re-optimization work performed.
 - b. Consultant shall furnish an updated intersection graphic display for the subject intersection to IDOT and to IDOT's Traffic Signal Maintenance Contractor.

(b) LEVEL II Re-Optimization

1. In addition to the requirements described in the LEVEL I Re-Optimization above, the following tasks are associated with LEVEL II Re-Optimization.
 - a. Traffic counts shall be taken at the subject intersection after the traffic signals are approved for operation by the Area Traffic Signal Operations Engineer. Manual turning movement counts shall be conducted from 6:30 a.m. to 9:30 a.m., 11:00 a.m. to 1:00 p.m., and 3:30 p.m. to 6:30 p.m. on a typical weekday from midday Monday to midday Friday. The turning movement counts shall identify cars, and single-unit, multi-unit heavy vehicles, and transit buses.
 - b. As necessary, the intersections shall be re-addressed and all system detectors reassigned in the master controller according to the current standard of District One.
 - c. Traffic responsive program operation shall be evaluated to verify proper pattern selection and lack of oscillation and a report of the operation shall be provided to IDOT.
2. The following deliverables shall be provided for LEVEL II Re-Optimization.
 - a. Consultant shall furnish to IDOT one (1) copy of a technical memorandum for the optimized system. The technical memorandum shall include the following elements:
 - (1) Brief description of the project
 - (2) Printed copies of the analysis output from Synchro (or other appropriate, approved optimization software file)
 - (3) Printed copies of the traffic counts conducted at the subject intersection
 - b. Consultant shall furnish to IDOT two (2) CDs for the optimized system. The CDs shall include the following elements:
 - (1) Electronic copy of the technical memorandum in PDF format
 - (2) Revised Synchro files (or other appropriate, approved optimization software file) including the new signal and the rest of the signals in the closed loop system
 - (3) Traffic counts conducted at the subject intersection
 - (4) New or updated intersection graphic display file for the subject intersection

- (5) The CD shall be labeled with the IDOT system number and master location, as well as the submittal date and the consultant logo. The CD case shall include a clearly readable label displaying the same information securely affixed to the side and front.

Basis of Payment.

This work shall be paid for at the contract unit price each for RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL I or RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL II, which price shall be payment in full for performing all work described herein per intersection. Following completion of the timings and submittal of specified deliverables, 100 percent of the bid price will be paid.

OPTIMIZE TRAFFIC SIGNAL SYSTEM

Description.

This work shall consist of optimizing a closed loop traffic signal system.

OPTIMIZE TRAFFIC SIGNAL SYSTEM applies when a new or existing closed loop traffic signal system is to be optimized and a formal Signal Coordination and Timing (SCAT) Report is to be prepared. The purpose of this work is to improve system performance by optimizing traffic signal timings, developing a time of day program and a traffic responsive program.

After the signal improvements are completed, the signal system shall be optimized as specified by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District One of the Illinois Department of Transportation. The Contractor shall contact the Traffic Signal Engineer at (815) 334-4960 for a listing of approved Consultants. Traffic signal system optimization work, including fine-tuning adjustments of the optimized system, shall follow the requirements stated in the most recent IDOT District 1 SCAT Guidelines, except as note herein.

A listing of existing signal equipment, interconnect information, phasing data, and timing patterns may be obtained from the Department, if available and as appropriate. The existing SCAT Report is available for review at the District One office and if the Consultant provides blank computer disks, copies of computer simulation files for the existing optimized system and a timing database that includes intersection displays will be made for the Consultant. The Consultant shall confer with the Traffic Signal Engineer prior to optimizing the system to determine if any extraordinary conditions exist that would affect traffic flows in the vicinity of the system, in which case, the Consultant may be instructed to wait until the conditions return to normal or to follow specific instructions regarding the optimization.

(a) The following tasks are associated with OPTIMIZE TRAFFIC SIGNAL SYSTEM.

1. Appropriate signal timings and offsets shall be developed for each intersection and appropriate cycle lengths shall be developed for the closed loop signal system.
2. Traffic counts shall be taken at all intersections after the permanent traffic signals are approved for operation by the Area Traffic Signal Operations Engineer. Manual turning movement counts shall be conducted from 6:30 a.m. to 9:30 a.m., 11:00 a.m. to 1:00 p.m., and 3:30 p.m. to 6:30 p.m. on a typical weekday from midday Monday to midday Friday. The turning movement counts shall identify cars, and single-unit and multi-unit heavy vehicles.
3. As necessary, the intersections shall be re-addressed and all system detectors reassigned in the master controller according to the current standard of District One.
4. A traffic responsive program shall be developed, which considers both volume and occupancy. A time-of-day program shall be developed for used as a back-up system.
5. Proposed signal timing plan for the new or modified intersection shall be forwarded to IDOT for review prior to implementation.

6. Consultant shall conduct on-site implementation of the timings and make fine-tuning adjustments to the timings in the field to alleviate observed adverse operating conditions and to enhance operations.
 7. Speed and delay studies shall be conducted during each of the count periods along the system corridor in the field before and after implementation of the proposed timing plans for comparative evaluations. These studies should utilize specialized electronic timing and measuring devices.
- (b). The following deliverables shall be provided for OPTIMIZE TRAFFIC SIGNAL SYSTEM.
1. Consultant shall furnish to IDOT one (1) copy of a SCAT Report for the optimized system. The SCAT Report shall include the following elements:

<p>Cover Page in color showing a System Map</p> <p>Figures</p> <ol style="list-style-type: none"> 1. System overview map – showing system number, system schematic map with numbered system detectors, oversaturated movements, master location, system phone number, cycle lengths, and date of completion. 2. General location map in color – showing signal system location in the metropolitan area. 3. Detail system location map in color – showing cross street names and local controller addresses. 4. Controller sequence – showing controller phase sequence diagrams.
<p>Table of Contents</p> <p>Tab 1: Final Report</p> <ol style="list-style-type: none"> 1. Project Overview 2. System and Location Description (Project specific) 3. Methodology 4. Data Collection 5. Data Analysis and Timing Plan Development 6. Implementation <ol style="list-style-type: none"> a. Traffic Responsive Programming (Table of TRP vs. TOD Operation) 7. Evaluation <ol style="list-style-type: none"> a. Speed and Delay runs
<p>Tab 2. Turning Movement Counts</p> <ol style="list-style-type: none"> 1. Turning Movement Counts (Showing turning movement counts in the intersection diagram for each period, including truck percentage)
<p>Tab 3. Synchro Analysis</p> <ol style="list-style-type: none"> 1. AM: Time-Space diagram in color, followed by intersection Synchro report (Timing report) summarizing the implemented timings. 2. Midday: same as AM 3. PM: same as AM
<p>Tab 4: Speed and Delay Studies</p> <ol style="list-style-type: none"> 1. Summary of before and after runs results in two (2) tables showing travel time and delay time. 2. Plot of the before and after runs diagram for each direction and time period.
<p>Tab 5: Electronic Files</p> <ol style="list-style-type: none"> 1. Two (2) CDs for the optimized system. The CDs shall include the following elements: <ol style="list-style-type: none"> a. Electronic copy of the SCAT Report in PDF format b. Copies of the Synchro files for the optimized system c. Traffic counts for the optimized system d. New or updated intersection graphic display files for each of the system intersections and the system graphic display file including system detector locations and addresses.

Basis of Payment.

The work shall be paid for at the contract unit each for OPTIMIZE TRAFFIC SIGNAL SYSTEM, which price shall be payment in full for performing all work described herein for the entire traffic signal system.

Following the completion of traffic counts, 25 percent of the bid price will be paid. Following the completion of the Synchro analysis, 25 percent of the bid price will be paid. Following the setup and fine tuning of the timings, the speed-delay study, and the TRP programming, 25 percent of the bid price will be paid. The remaining 25 percent will be paid when the system is working to the satisfaction of the engineer and the report and CD have been submitted.

TEMPORARY TRAFFIC SIGNAL TIMINGS

Description.

This work shall consist of developing and maintaining appropriate traffic signal timings for the specified intersection for the duration of the temporary signalized condition.

All timings and adjustments necessary for this work shall be performed by an approved Consultant who has previous experience in optimizing Closed Loop Traffic signal Systems for District One of the Illinois Department of Transportation. The Contractor shall contact the Traffic Signal Engineer at (847) 705-4424 for a listing of approved Consultants.

The following tasks are associated with TEMPORARY TRAFFIC SIGNAL TIMINGS.

- (a) Consultant shall attend temporary traffic signal inspection (turn-on) and conduct on-site implementation of the traffic signal timings. Make fine-tuning adjustments to the timings in the field to alleviate observed adverse operating conditions and to enhance operations.
- (b) Consultant shall provide monthly observation of traffic signal operations in the field.
- (c) Consultant shall provide on-site consultation and adjust timings as necessary for construction stage changes, temporary traffic signal phase changes, and any other conditions affecting timing and phasing, including lane closures, detours, and other construction activities.
- (d) Consultant shall make timing adjustments and prepare comment responses as directed by the Area Traffic Signal Operations Engineer.

Basis of Payment.

The work shall be paid for at the contract unit price each for TEMPORARY TRAFFIC SIGNAL TIMINGS, which price shall be payment in full for performing all work described herein per intersection. When the temporary traffic signal installation is turned on, 50 percent of the bid price will be paid. The remaining 50 percent of the bid price will be paid following the removal of the temporary traffic signal installation.

TEMPORARY TRAFFIC SIGNAL INSTALLATION.

Revise Section 890 of the Standard Specifications to read:

General.

Only an approved equipment vendor will be allowed to assemble the temporary traffic signal cabinet. Also, an approved equipment vendor shall assemble and test a temporary railroad traffic signal cabinet. (Refer to the "Inspection of Controller and Cabinet" specification). A representative of the approved control equipment vendor shall be present at the temporary traffic signal turn-on inspection.

Construction Requirements.

(a) Controllers.

1. Only controllers supplied by one of the District approved closed loop equipment manufacturers will be approved for use at temporary signal locations. All controllers used for temporary traffic signals shall be fully actuated NEMA microprocessor based with RS232 data entry ports compatible with existing monitoring software approved by IDOT District 1, installed in TS2 cabinets with 8 phase back panels, capable of supplying 255 seconds of cycle length and individual phase length settings up to 99 seconds. On projects with one lane open and two way traffic flow, such as bridge deck repairs, the temporary signal controller shall be capable of providing an adjustable all red clearance setting of up to 30 seconds in length. All controllers used for temporary traffic signals shall meet or exceed the requirements of Section 857 of the Standard Specifications with regards to internal time base coordination and preemption.
2. All control equipment for the temporary traffic signal(s) shall be furnished by the Contractor unless otherwise stated in the plans. On projects with multiple temporary traffic signal installations, all controllers shall be the same manufacturer brand and model number with current software installed.

(b) Cabinets. All temporary traffic signal cabinets shall have a closed bottom made of aluminum alloy. The bottom shall be sealed along the entire perimeter of the cabinet base to ensure a water, dust and insect-proof seal. The bottom shall provide a minimum of two (2) 4 inch (100 mm) diameter holes to run the electric cables through. The 4 inch (100 mm) diameter holes shall have a bushing installed to protect the electric cables and shall be sealed after the electric cables are installed.

(c) Grounding. Grounding shall be provided for the temporary traffic signal cabinet meeting or exceeding the applicable portions of the National Electrical Code, Section 807 of the Standard Specifications and shall meet the requirements of the District 1 Traffic Signal Specifications for "Grounding of Traffic Signal Systems".

(d) Traffic Signal Heads. All traffic signal sections and pedestrian signal sections shall be 12 inches (300 mm). Traffic signal sections shall be LED with expandable view, unless otherwise approved by the Engineer. The temporary traffic signal heads shall be placed as indicated on the temporary traffic signal plan or as directed by the Engineer. The Contractor shall furnish enough extra cable length to relocate heads to any position on the span wire or at locations illustrated on the plans for construction staging. The temporary traffic signal shall remain in operation during all signal head relocations. Each temporary traffic signal head shall have its own cable from the controller cabinet to the signal head.

(e) Interconnect.

1. Temporary traffic signal interconnect shall be provided using fiber optic cable or wireless interconnect technology as specified in the plans. The Contractor may request, in writing, to substitute the fiber optic temporary interconnect indicated in the contract documents with a wireless interconnect. The Contractor must provide assurances that the radio device will operate properly at all times and during all construction staging. If approved for use by the Engineer, the Contractor shall submit marked-up traffic signal plans indicating locations of radios and antennas and installation details. If wireless interconnect is used, and in the opinion of the engineer, it is not viable, or if it fails during testing or operations, the Contractor shall be responsible for installing all necessary poles, fiber optic cable, and other infrastructure for providing temporary fiber optic interconnect at no cost to the contract.

2. The existing system interconnect and phone lines are to be maintained as part of the Temporary Traffic Signal Installation specified for on the plan. The interconnect shall be installed into the temporary controller cabinet as per the notes or details on the plans. All labor and equipment required to install and maintain the existing interconnect as part of the Temporary Traffic Signal Installation shall be included in the item Temporary Traffic Signal Installation. When shown in the plans, temporary traffic signal interconnect equipment shall be furnished and installed. The temporary traffic signal interconnect shall maintain interconnect communications throughout the entire signal system for the duration of the project.
3. Temporary wireless interconnect, compete. The radio interconnect system shall be compatible with Eagle or Econolite controller closed loop systems. This item shall include all materials, labor and testing to provide the completely operational closed loop system as shown on the plans. The radio interconnect system shall include the following components:
 - a. Rack or Shelf Mounted RS-232 Frequency Hopping Spread Spectrum (FHSS) Radio
 - b. Software for Radio Configuration (Configure Frequency and Hopping Patterns)
 - c. Antennas (Omni Directional or Yagi Directional)
 - d. Antenna Cables, LMR400, Low Loss. Max. 100-ft from controller cabinet to antenna
 - e. Brackets, Mounting Hardware, and Accessories Required for Installation
 - f. RS232 Data Cable for Connection from the radio to the local or master controller
 - g. All other components required for a fully functional radio interconnect system

All controller cabinet modifications and other modifications to existing equipment that are required for the installation of the radio interconnect system components shall be included in this item.

The radio interconnect system may operate at 900Mhz (902-928) or 2.4 Ghz depending on the results of a site survey. The telemetry shall have an acceptable rate of transmission errors, time outs, etc. comparable to that of a hardwire system.

The proposed master controller and telemetry module shall be configured for use with the radio interconnect at a minimum rate of 9600 baud.

The radio interconnect system shall include all other components required for a complete and fully functional telemetry system and shall be installed in accordance to the manufacturers recommendations.

The following radio equipment is currently approved for use in Region One/District One: Encon Model 5100 and Intuicom Communicator II.

- (f) Emergency Vehicle Pre-Emption. All emergency vehicle preemption equipment (light detectors, light detector amplifiers, confirmation beacons, etc.) as shown on the temporary traffic signal plans shall be provided by the Contractor. It shall be the Contractor's responsibility to contact the municipality or fire district to verify the brand of emergency vehicle preemption equipment to be installed prior to the contract bidding. The equipment must be completely compatible with all components of the equipment currently in use by the Agency. All light operated systems shall operate at a uniform rate of 14.035 hz \pm 0.002, or as otherwise required by the Engineer, and provide compatible operation with other light systems currently being operated in the District. All labor and material required to install and maintain the Emergency Vehicle Preemption installation shall be included in the item Temporary Traffic Signal Installation.

- (g) **Vehicle Detection.** All temporary traffic signal installations shall have vehicular detection installed as shown on the plans or as directed by the Engineer. Pedestrian push buttons shall be provided for all pedestrian signal heads/phases as shown on the plans or as directed by the Engineer. All approaches shall have vehicular detection provided by Video Vehicle Detection System as shown on the plans or as directed by the Engineer. The microwave vehicle sensor or video vehicle detection system shall be approved by IDOT before furnishing and installing. The Contractor shall install, wire, and adjust the alignment of the microwave vehicle sensor or video vehicle detection system in accordance to the manufacturer's recommendations and requirements. The Contractor shall be responsible for adjusting the alignment of the microwave vehicle sensor or video vehicle detection system for all construction staging changes and for maintaining proper alignment throughout the project. A representative of the approved control equipment vendor shall be present and assist the contractor in setting up and maintaining the microwave vehicle sensor or video vehicle detection system. An in-cabinet video monitor shall be provided with all video vehicle detection systems and shall be included in the item Temporary Traffic Signal Installation.
- (h) **Signs.** All existing street name and intersection regulatory signs shall be removed from existing poles and relocated to the temporary signal span wire. If new mast arm assembly and pole(s) and posts are specified for the permanent signals, the signs shall be relocated to the new equipment at no extra cost.
- (i) **Energy Charges.** The electrical utility energy charges for the operation of the traffic signal installation shall be paid for by others if the installation replaces an existing signal. Otherwise charges shall be paid for under 109.05 of the Standard Specifications.
- (j) **Maintenance.** Maintenance shall meet the requirements of the Traffic Specifications and District Specifications for "Maintenance of Existing Traffic Signal Installation." Maintenance of temporary signals and of the existing signals shall be included to the cost of this item. When temporary traffic signals are to be installed at locations where existing signals are presently operating, the Contractor shall be fully responsible for the maintenance of the existing signal installation as soon as he begins any physical work on the Contract or any portion thereof. Maintenance responsibility of the existing signals shall be included to the item Temporary Traffic Signal Installation(s). In addition, a minimum of seven (7) days prior to assuming maintenance of the existing traffic signal installation(s) under this Contract, the Contractor shall request that the Resident Engineer contact the Bureau of Traffic (847) 705-4424 for an inspection of the installation(s).
- (k) **Temporary Traffic Signals for Bridge Projects.** Temporary Traffic Signals for bridge projects shall follow the State Standards, Standard Specifications, District 1 Traffic Signal Specifications and any plans for Bridge Temporary Traffic Signals included in the plans. The installation shall meet the above requirements for "Temporary Traffic Signal Installation". In addition all electric cable shall be aerially suspended, at a minimum height of 18 feet (5.5m), on temporary wood poles (Class 5 or better) of 45 feet (13.7 m), minimum height. The signal heads shall be span wire mounted or bracket mounted to the wood pole or as directed by the Engineer. The Controller cabinet shall be mounted to the wood pole or as directed by the Engineer. Microwave vehicle sensors or video vehicle detection may be used in place of the detector loops as approved by the Engineer.
- (l) **Temporary Portable Traffic Signal for Bridge Projects.**
1. Unless otherwise directed by the Engineer, temporary portable traffic signals shall be restricted to use on roadways of less than 8000 ADT that have limited access to electric utility service, shall not be installed on projects where the estimated need exceeds ten (10) weeks, and shall not be in operation during the period of November through March. The Contractor shall replace the temporary portable traffic signals with temporary span wire traffic signals noted herein at no cost to the contract if the

bridge project or Engineer requires temporary traffic signals to remain in operation into any part of period of November through March. If, in the opinion of the engineer, the reliability and safety of the temporary portable traffic signal is not similar to that of a temporary span wire traffic signal installation, the Contractor shall replace the temporary portable traffic signals with temporary span wire traffic signals noted herein at no cost to the contract.

2. The controller and LED signal displays shall meet the above requirements for "Temporary Traffic Signal Installation".
3. Work shall be according to Article 701.18(b) of the Standard Specifications except as noted herein.
4. General.
 - a. The temporary portable bridge traffic signals shall be trailer-mounted units. The trailer-mounted units shall be set up securely and level. Each unit shall be self-contained and consist of two signal heads. The left signal head shall be mounted on a mast arm capable of extending over the travel lane. Each unit shall contain a solar cell system to facilitate battery charging. There shall be a minimum of 12 days backup reserve battery supply and the units shall be capable of operating with a 120 V power supply from a generator or electrical service.
 - b. All signal heads located over the travel lane shall be mounted at a minimum height of 17 feet (5m) from the bottom of the signal back plate to the top of the road surface. All far right signal heads located outside the travel lane shall be mounted at a minimum height of 8 feet (2.5m) from the bottom of the signal back plate to the top of the adjacent travel lane surface.
 - c. The long all red intervals for the traffic signal controller shall be adjustable up to 250 seconds in one-second increments.
 - d. As an alternative to detector loops, temporary portable bridge traffic signals may be equipped with microwave sensors or other approved methods of vehicle detection and traffic actuation.
 - e. All portable traffic signal units shall be interconnected using hardwire communication cable. Radio communication equipment may be used only with the approval of the Engineer. If radio communication is used, a site analysis shall be completed to ensure that there is no interference present that would affect the traffic signal operation. The radio equipment shall meet all applicable FCC requirements.
 - f. The temporary portable bridge traffic signal system shall meet the physical display and operational requirements of conventional traffic signals as specified in Part IV of the Manual on Uniform Traffic Control Devices (MUTCD). The signal system shall be designed to continuously operate over an ambient temperature range between -30 °F (-34 °C) and 120 °F (48 °C). When not being utilized to inform and direct traffic, portable signals shall be treated as nonoperating equipment according to Article 701.11.
 - g. Basis of Payment. This work will be paid for according to Article 701.20(c).

Basis of Payment.

This work shall be paid for at the contract unit price each for TEMPORARY TRAFFIC SIGNAL INSTALLATION, TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION, or TEMPORARY

PORTABLE BRIDGE TRAFFIC SIGNAL INSTALLATION. The price of which shall include all costs for the modifications required for traffic staging, changes in signal phasing as required in the Contract plans, microwave vehicle sensors, video vehicle detection system, any maintenance or adjustment to the microwave vehicle sensors/video vehicle detection system, all material required, the installation and complete removal of the temporary traffic signal.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

Add the following to Section 895.05 of the Standard Specifications:

The traffic signal equipment, which is to be removed and is to become the property of the Contractor shall be disposed of by them outside the right-of-way at their expense.

All equipment to be returned to the County shall be delivered by the Contractor to the County's Traffic Signal Maintenance Contractor's main facility. The Contractor shall contact the County's Electrical Maintenance Contractor to schedule an appointment to deliver the equipment. No equipment will be accepted without a prior appointment. All equipment shall be delivered within 30 days of removing it from the traffic signal installation. The Contractor shall provide 5 copies of a list of equipment that is to remain the property of the State, including model and serial numbers, where applicable. He shall also provide a copy of the Contract plan or special provision showing the quantities and type of equipment. Controllers and peripheral equipment from the same location shall be boxed together (equipment from different locations may not be mixed) and all boxes and controller cabinets shall be clearly marked or labeled with the location from which they were removed. If equipment is not returned with these requirements, it will be rejected by the County's Electrical Maintenance Contractor. The Contractor shall be responsible for the condition of the traffic signal equipment from the time he takes maintenance of the signal installation until the acceptance of a receipt drawn by the County's Electrical Maintenance Contractor indicating the items have been returned in good condition.

The Contractor shall safely store and arrange for pick up of all equipment to be returned to agencies other than the State. The Contractor shall package the equipment and provide all necessary documentation as stated above.

Traffic signal equipment, which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of these Specifications.

TRAFFIC SIGNAL PAINTING.

Description.

This work shall include surface preparation, powder type painted finish application and packaging of new galvanized steel traffic signal mast arm poles and posts assemblies. All work associated with applying the painted finish shall be performed at the manufacturing facility for the pole assembly or post or at a painting facility approved by the Engineer. Traffic signal mast arm shrouds and post bases shall also be painted the same color as the pole assemblies and posts.

Surface Preparation.

All weld flux and other contaminates shall be mechanically removed. The traffic mast arms and post assemblies shall be degreased, cleaned, and air dried to assure all moisture is removed.

Painted Finish.

All galvanized exterior surfaces shall be coated with a urethane or triglycidyl isocyanurate (TGIC) polyester powder to a dry film thickness of 2.0 mils. Prior to application, the surface shall be mechanically etched by brush blasting (Ref. SSPC-SP7) and the zinc coated substrate preheated to 450 degrees F for a minimum one (1) hour. The coating shall be electrostatically applied and cured by elevating the zinc-coated substrate temperature to a minimum of 400 degrees F.

The finish paint color shall be one of the manufacturer's standard colors and shall be as selected by the local agency responsible for paint costs. The Contractor shall confirm, in writing, the color selection with the local responsible agency and provide a copy of the approval to the Engineer and a copy of the approval shall be included in the material catalog submittal.

Traffic signal heads, pedestrian signal heads and controller cabinets are not included in this pay item.

Any damage to the finish after leaving the manufacturer's facility shall be repaired to the satisfaction of the Engineer using a method approvable by the Engineer and manufacturer. If while at the manufacturer's facility the finish is damaged, the finish shall be re-applied.

Warranty.

The Contractor shall furnish in writing to the Engineer, the paint manufacturer's standard warranty and certification that the paint system has been properly applied.

Packaging.

Prior to shipping, the poles and posts shall be wrapped in ultraviolet-inhibiting plastic foam or rubberized foam.

Basis of Payment.

This work shall be paid for at the contract unit price each for PAINT NEW MAST ARM POLE, UNDER 40 FEET (12.19 METER); PAINT NEW MAST ARM POLE, 40 FEET (12.19 METER) AND OVER; PAINT NEW COMBINATION MAST ARM POLE, UNDER 40 FEET (12.19 METER); PAINT NEW COMBINATION MAST ARM POLE, 40 FEET (12.19 METER) AND OVER; or TRAFFIC SIGNAL POST of any height, which shall be payment in full for painting and packaging the traffic signal mast arm poles and posts described above including all shrouds, bases and appurtenances.

DIVISION 1000 MATERIALS

PEDESTRIAN PUSH-BUTTON.

Add the following to Section 1074.02 (b) and (d) of the Standard Specifications to read:

- (a) General. Push-button assemblies shall be ADA compliant, highly vandal resistant, be pressure activated with minimal movement and cannot be stuck in a closed or constant call position. A red LED and audible tone shall be provided for confirmation of an actuation call.
- (b) Housing. The push-button housing shall be solid 6061 aluminum and powder coated yellow, unless otherwise noted on the plans.
- (c) Actuator. The actuator shall be stainless steel with a solid state electronic Piezo switch rated for a minimum of 20 million cycles with no moving plunger or moving electrical contacts. The operating voltage shall be 12-24 V AC/DC.
- (d) Pedestrian Station. Stations shall be designed to be mounted directly to a post, mast arm pole or wood pole. The station shall be aluminum and accept a 3-inch round push button assembly and 5 X 7 $\frac{3}{4}$ -inch R10-3b or R10-3d sign. A larger station will be necessary to accommodate the sign, R10-3e, for a count-down pedestrian signal.

The McHenry County Division of Transportation accepts the following pedestrian push buttons:

- > Campbell Company Pedestrian Buttons, model 4 EVR 120 yellow aluminum bezel and stainless steel plunger. TS2 Compliant: minimum 120 ms signal duration. Button to have latching LED light and audible tone.
- > Polara Engineering Bulldog Pedestrian Pushbuttons, model BDLL2-Y yellow aluminum bezel and stainless steel plunger. TS2 Compliant: minimum 120 ms signal duration. Button to have latching LED light and audible tone.

CONTROLLER CABINET AND PERIPHERAL EQUIPMENT.

Revise Section 1074.03 of the Standard Specifications to read:

Add the following to Article 1074.03 of the Standard Specifications:

- (a) Cabinets shall be designed for NEMA TS2 Type 1 operation. All cabinets shall be pre-wired for a minimum of eight (8) phases of vehicular, four (4) phases of pedestrian and four (4) phases of overlap operation.
- (b)(5) Cabinets – Provide 1/8" (3.2 mm) thick unpainted aluminum alloy 5052-H32. The surface shall be smooth, free of marks and scratches. All external hardware shall be stainless steel.
- (b) (6) Controller Harness – Provide a TS2 Type 2 "A" wired harness in addition to the TS2 Type 1 harness.
- (b) (7) Surge Protection – ASC Zone IT (50 kA rating) with LED status indicators. Model 91391 Zone IT base station and Model 91375 Zone IT or equivalent ASC model.
- (b) (8) BIU – Containment screw required.
- (b) (9) Transfer Relays – Solid state or mechanical flash relays are acceptable.
- (b) (10) Switch Guards – All switches shall be guarded.
- (b) (11) Heating – Electric heaters (2 total), Hoffman model DAH2001A or equivalent located in lower left and upper right corners of cabinet, controlled by both a wall switch and a thermostat.
- (b) (12) Plan & Wiring Diagrams – 12" x 16" (3.05mm x 4.06mm) moisture sealed container attached to door.
- (b) (13) Detector Racks – Fully wired and labeled for four (4) channels of emergency vehicle pre-emption and sixteen channels (16) of vehicular operation.
- (b) (14) Field Wiring Labels – All field wiring shall be labeled.
- (b) (15) Field Wiring Termination – Approved channel lugs required.
- (b) (16) Power Panel – Provide a nonconductive shield.
- (b) (17) Circuit Breaker – The circuit breaker shall be sized for the proposed load but shall not be rated less than 30 amps.
- (b) (18) Police Door – Provide wiring and termination for plug in manual phase advance switch.
- (b) (19) Railroad Pre-Emption Test Switch – Eaton 8830K13 SHA 1250 or equivalent.

RAILROAD, FULL-ACTUATED CONTROLLER AND CABINET.

Add the following to Article 857.02 of the Standard Specifications:

Controller shall comply with Article 1073.01 as amended in these Traffic Signal Special Provisions.

Controller Cabinet and Peripheral Equipment shall comply with Article 1074.03 as amended in these Traffic Signal Special Provisions.

Add the following to Articles 1073.01 (c) (2) and 1074.03 (a) (5) (e) of the Standard Specifications:

Controllers and cabinets shall be new and NEMA TS2 Type 1 design.

A method of monitoring and/or providing redundancy to the railroad preemptor input to the controller shall be included as a component of the Railroad, Full Actuated Controller and Cabinet installation and be verified by the traffic signal equipment supplier prior to installation.

Railroad interconnected controllers and cabinets shall be assembled only by an approved traffic signal equipment supplier. The equipment shall be tested and approved in the equipment supplier's District One facility prior to field installation.

ELECTRIC CABLE.

Delete "or stranded, and No. 12 or" from the last sentence of Section 1076.04 (a) of the Standard Specifications.

MAST ARM ASSEMBLY AND POLE.

Add the following to Section 1077.03 (a) of the Standard Specifications:

Traffic signal mast arms shall be one piece construction, unless otherwise approved by the Engineer. All poles shall be galvanized. If the Department approves painting, powder coating by the manufacturer will be required over the galvanization.

This work shall consist of furnishing and installing a galvanized steel or extruded aluminum shroud for protection of the mast arm pole base plate similar to the dimensions detailed in the "District 1 Standard Traffic Signal Design Details." The shroud shall be of sufficient strength to deter pedestrian and vehicular damage. The shroud shall allow air to circulate throughout the mast arm but not allow manifestation of insects or critters. The shroud shall be constructed, installed and designed not to be hazardous to probing fingers and feet. All mounting hardware shall be stainless steel. The shroud shall not be paid for separately but shall be included in the cost of the mast arm assembly and pole.

TRAFFIC SIGNAL POST.

Add the following to Section 1077.03 (b) of the Standard Specifications:

All posts and bases shall be steel and hot dipped galvanized. If the Department approves painting, powder coating by the manufacturer will be required over the galvanization.

SIGNAL HEADS.

Add the following to Section 1078 of the Standard Specifications to read:

All signal and pedestrian heads shall provide 12" (300 mm) displays with glossy yellow polycarbonate housings. All head housings shall be the same color (yellow) at the intersection. For new signalized intersections and existing signalized intersections where all signal and/or pedestrian heads are being replaced, the proposed head housings shall be yellow. Where only selected heads are being replaced, the proposed head housing color (yellow) shall match existing head housings. Connecting hardware and mounting brackets shall be polycarbonate (black). A corrosive resistant anti-seize lubricant shall be applied to all metallic mounting bracket joints, and shall be visible to the inspector at the signal turn-on. Post top mounting collars are required on all posts, and shall be constructed of the same material as the brackets.

Pedestrian signal heads shall be furnished with the international symbolic "Walking Person" and "Upraised Palm" lenses. Egg crate sun shields are not permitted.

Signal heads shall be positioned according to the "District 1 Standard Traffic Signal Design Details."

SIGNAL HEAD, BACKPLATE.

Delete 1st sentence of 1078.03 of the Standard Specifications and add "All backplates shall be aluminum and louvered."

INDUCTIVE LOOP DETECTOR.

Add the following to Section 1079.01 of the Standard Specifications:

Contracts requiring new cabinets shall provide for card mounted detector amplifiers. Loop amplifiers shall provide LCD displays with loop frequency, inductance, and change of inductance readings.

ILLUMINATED SIGN, LIGHT EMITTING DIODE.

Revise Sections 891 of the Standard Specifications to read:

Description.

This work shall consist of furnishing and installing an illuminated sign with light emitting diodes.

General.

The light emitting diode (LED) blank out signs shall be manufactured by National Sign & Signal Company, or an approved equal and consist of a weatherproof housing and door, LEDs and transformers.

(a) Display.

1. The LED blank out sign shall provide the correct symbol and color for "NO LEFT TURN" OR "NO RIGHT TURN" indicated in accordance with the requirements of the "Manual on Uniform Traffic Control Devices". The message shall be formed by rows of LEDs.
2. The message shall be clearly legible. The message shall be highly visible, anywhere and under any lighting conditions, within a 15 degree cone centered about the optic axis.

The sign face shall be 24 inches (600 mm) by 24 inches (600 mm). The sign face shall be completely illegible when not illuminated. No symbol shall be seen under any ambient light condition when not illuminated.

3. All LEDs shall be T-1 3/4 (5mm) and have an expected lamplife of 100,000 hours. Operating wavelengths will be Red-626nm, Amber-590nm, and Bluish/Green-505nm. Transformers shall be rated for the line voltage with Class A insulation and weatherproofing. The sign shall be designed for operation over a range of temperatures from -35F to +165 F (-37C to +75C).
4. The LED module shall include the message plate, high intensity LEDs and LED drive electronics. Door panels shall be flat black and electrical connections shall be made via barrier-type terminal strip. All fasteners and hardware shall be corrosion resistant stainless steel.

(b) Housing.

1. The housing shall be constructed of extruded aluminum. All corners and seams shall be heli-arc welded to provide a weatherproof seal around the entire case. Hinges shall be continuous full-length stainless steel. Signs shall have stainless steel hardware and provide tool free access to the interior of the sign. Doors shall be 0.125-inch thick extruded aluminum with a 3/16-inch x 1-inch neoprene gasket and sun hood. The sign face shall have a polycarbonate, matte clear, lexan face plate. Drainage shall be provided by four drain holes at the corners of the housing. The finish on the sign housing shall include two coats of exterior enamel applied after the surface is acid-etched and primed with zinc-chromate primer.
2. Mounting hardware shall be black polycarbonate or galvanized steel and similar to mounting Signal Head hardware and brackets specified herein.

Basis of Payment.

This work shall be paid for at the unit price each for ILLUMINATED SIGN, L.E.D.

GROUNDING EXISTING HANDHOLE FRAME AND COVER.

Description.

This work shall consist of all materials and labor required to bond the equipment grounding conductor to the existing handhole frame and handhole cover. All installations shall meet the requirements of the details in the "District One Standard Traffic Signal Design Details" and applicable portions of the Specifications.

The equipment grounding conductor shall be bonded to the handhole frame and to the handhole cover. Two (2) ½-inch diameter x 1 ¼-inch long hex-head stainless steel bolts, spaced 1.75-inches apart center-to-center shall be fully welded to the frame and to the cover to accommodate a heavy duty Listed grounding compression terminal (Burdny type YGHA or approved equal). The grounding compression terminal shall be secured to the bolts with stainless steel split-lock washers and nylon-insert locknuts.

Welding preparation for the stainless steel bolt hex-head to the frame and to the cover shall include thoroughly cleaning the contact and weldment area of all rust, dirt and contaminants. The Contractor shall assure a solid strong weld. The welds shall be smooth and thoroughly cleaned of flux and spatter. The grounding installation shall not affect the proper seating of the cover when closed.

The grounding cable shall be paid for separately.

Method of Measurement.

Units measured for payment will be counted on a per handhole basis, regardless of the type of handhole and its location.

Basis of Payment.

This work shall be paid for at the contract unit price each for GROUNDING EXISTING HANDHOLE FRAME AND COVER which shall be payment in full for grounding the handhole complete.

UNIT DUCT.

All installations of Unit Duct shall be incidental to the contract and not paid for separately. Polyethylene unit duct shall be used for detector loop raceways to the handholes. On temporary traffic signal installations with detector loops, polyethylene unit duct shall be used for detector loop raceways from the saw-cut to (3 m) 10' up the wood pole, unless otherwise shown on the plans. Unit duct shall meet the requirements of NEC Article 343.

UNINTERRUPTIBLE POWER SUPPLY (UPS)

NOTE: The McHenry County Division of Transportation currently accepts TechPower M-E XL series UPS equipment with Optima BlueTop Marine batteries, or MK Battery Company sealed batteries.

This specification sets forth the minimum requirements for an uninterruptible power system with battery back-up, for a traffic signal. The system is comprised of the UPS or Inverter unit, bypass switch, batteries, cabinet, and related wiring harnesses.

UPS (Inverter Unit)

The UPS shall produce a fully regenerated, conditioned, regulated pure sine wave 120-volt AC (+/- 4%) power output in all operational modes to all traffic control equipment.

The electronic control circuit shall constantly sample the AC input. The UPS shall provide a steady 120v AC from an input source as low as 85 volts and as high as 135volts AC before using the inverter / battery to provide 120 volts to the load.

The switching to battery/inverter will occur in less than 4 milliseconds after utility voltage fluctuations or deviations travel outside preset parameters. The inverter's output shall be pure clean sine wave with an efficiency of 94% at 100% load. The inverter circuit shall be capable of high duty cycle operation.

The UPS shall be rated at Unity power factor (1000 watts) for continuous operation. The UPS shall be capable of providing an overload output rating of 150% of rated output for 10 minutes at Unity power factor (1500 watts).

In case of UPS failure and or battery depletion, the UPS will ensure upon the return of utility power that the utility power will be failsafe-bypassed to the traffic signal controller. An external manual bypass shall provide a secondary redundant path for the utility power if the internal UPS bypass fails. The UPS shall be capable of operating in a bypass mode until the depleted batteries have recharged to a predetermined state, and then resume full on-line operation. The UPS shall be capable of hot swapping the batteries or battery bank, without shutting down the UPS.

The UPS Front Panel shall have the following: A/C Input / Output circular connector, battery connector, multi-function dial timer, LCD display for counting power interruptions, real-time voltage meter and amp/watt meter, circular connector containing dry contact closure for UPS Fail, On Battery, Flash, Low Battery, and Alarm. The front panel shall also have LED indicators for AC/Battery power present, UPS Fault, Overload, Low Battery, and Ground Fault.

The UPS shall interface with the traffic signal controller or master controller to provide an alarm indicating battery operation. This alarm must be sent over the normal fiber optic/dial-up communication channels, and must appear as an Aries software Priority One event at the McHenry County Division of Transportation facilities.

The connector shall be rated for 150 amps DC.

Bypass Switch

The Bypass Switch shall consist of one main manual switch, which provides a means of placing the UPS into a bypassed position without interruption of the power to the intersection. A second switch provides a means of isolating the AC utility from the UPS. This provides a means of testing the UPS/Battery back-up by turning off the AC utility to the UPS with the UPS in normal operation. Both of these switches shall be rated 20 amps at 600 volts.

The Bypass Switch AC connections consist of two circular locking Input/Output connectors, phased to the UPS AC harness. This switch will include an alternate-source input connection, which provides a means of connecting a generator or alternate utility source. The Bypass Switch case shall be constructed of aluminum.

Batteries

This system shall be comprised of six (6) 12-volt batteries, as shown on the plans. Batteries shall be Optima Spiral Cell, blue top, deep cycle batteries, with a 55 Ah capacity, or an approved equal. The battery cable shall consist of a quick release connector rated at 150 amps. The connector shall have recessed pins and be polarized to prevent accidental cross connecting of the battery string to the UPS.

Cabinet

The cabinet shall be a California Chassis aluminum cabinet, Part Number FCU104013, with a natural aluminum mill finish, or approved equal.

The external cabinet dimensions shall be 41 inches tall by 25 inches wide by 16 inches deep, excluding the door. The cabinet shall house all batteries, the UPS, the Bypass Switch, and the wiring harnesses.

When installed, the cabinet for the UPS shall rest on the traffic signal cabinet foundation and shall also be secured to the right side of the traffic signal cabinet.

A blue LED indicator light shall be mounted on the side of the UPS cabinet facing traffic and shall turn on to indicate when cabinet power has been disrupted and the UPS is in operation. The light shall be a minimum of 1" in diameter, be viewable from the driving lanes, and shall be large enough and visible enough to be seen from 200 feet away.

The cabinet shall provide an external connection for an AC generator to power the signals, if necessary, during an extended utility power outage. The external connection shall be a NEMA Style 5-15 male flanged receptacle. A police door shall be provided in the upper half of the main door end encompassing the full area of the outlet panel. This shall be the location of the outlet to supply an external connection for an AC generator listed above. The standard dimensions of the panel are 7½" high, 12" wide and 2½" deep and are located directly behind the police door. A skeleton lock by Corbin is furnished for the police door unless otherwise specified.

Basis of Payment: This item shall be paid for at the contract unit price, each, for furnishing and installing the UNINTERRUPTIBLE POWER SUPPLY (UPS). The price shall include the UPS/Inverter unit, Bypass Switch, Batteries (six, according to the plans), Cabinet, wiring harnesses, and all associated equipment and materials necessary for proper operation.

SIGNAL HEAD, LIGHT EMITTING DIODE.

Description.

This work shall consist of furnishing and installing a traffic signal head or pedestrian signal head with light emitting diodes (LED) of the type specified in the plan or retrofitting an existing traffic signal head with a traffic signal module or pedestrian signal module with LEDs as specified in the plans.

General.

LED signal heads (All Face and Section Quantities), (All Mounting Types) shall conform fully to the requirements of Sections 880 and 881 and Articles 1078.01 and 1078.02 of the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2007, and amended herein:

1. The LED signal modules shall be replaced or repaired if an LED signal module fails to function as intended due to workmanship or material defects within the first 60 months from the date of delivery. LED signal modules which exhibit luminous intensities less than the minimum values specified in Table 1 of the ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement (June 27, 2005) [VTSCH] or show signs of entrance of moisture or contaminants within the first 60 months of the date of delivery shall be replaced or repaired. The manufacturer's written warranty for the LED signal modules shall be dated, signed by an Officer of the company and included in the product submittal to the State.
2. Each module shall consist of an assembly that utilizes LEDs as the light source in lieu of an incandescent lamp for use in traffic signal sections.

(a) Physical and Mechanical Requirements

1. Modules can be manufactured under this specification for the following faces:
 - a. 12 inch (300 mm) circular, multi-section
 - b. 12 inch (300 mm) arrow, multi-section
 - c. 12 inch (300 mm) pedestrian, 2 sections
2. The maximum weight of a module shall be 4 lbs. (1.8 kg).
3. Each module shall be a sealed unit to include all parts necessary for operation (a printed circuit board, power supply, a lens and gasket, etc.), and shall be weather proof after installation and connection.
4. Material used for the lens and signal module construction shall conform to ASTM specifications for the materials.
5. The lens of the module shall be tinted with a wavelength-matched color to reduce sun phantom effect and enhance on/off contrast. The tinting shall be uniform across the lens face. Polymeric lens shall provide a surface coating or chemical surface treatment applied to provide abrasion resistance. The lens of the module shall be integral to the unit, convex with a smooth outer surface and made of plastic. The lens shall have a textured surface to reduce glare.
6. The use of tinting or other materials to enhance ON/OFF contrasts shall not affect chromaticity and shall be uniform across the face of the lens.
7. Each module shall have a symbol of the type of module (i.e. circle, arrow, etc.) in the color of the module. The symbol shall be 1 inch (25.4 mm) in diameter. Additionally, the color shall be written out in 1/2 inch (12.7mm) letters next to the symbol.

(b) Photometric Requirements

1. The minimum initial luminous intensity values for the modules shall conform to the values in Table 1 of the VTCSH (2005) for circular signal indications, and as stated in Table 3 of these specifications for arrow and pedestrian indications at 25°C.
2. The modules shall meet or exceed the illumination values stated in Article 1078.01(3)c of the "Standard Specifications for Road and Bridge Construction," Adopted January 1, 2007 for circular signal indications, and Table 3 of these specifications for arrow and pedestrian indications, throughout the useful life based on normal use in a traffic signal operation over the operating temperature range.
3. The measured chromaticity coordinates of the modules shall conform to the chromaticity requirements of Section 4.2 of the VTCSH (2005).
4. The LEDs utilized in the modules shall be AlInGaP technology for red, yellow, Portland orange (pedestrian) and white (pedestrian) indications, and GaN for green indications, and shall be the ultra bright type rated for 100,000 hours of continuous operation from -40°C to +74°C.

(c) Electrical

1. Maximum power consumption for LED modules is per Table 2.
2. LED modules will have EPA Energy Star compliance ratings, if applicable to that shape, size and color.

3. Operating voltage of the modules shall be 120 VAC. All parameters shall be measured at this voltage.
4. The modules shall be operationally compatible with currently used controller assemblies (solid state load switches, flashers, and conflict monitors).
5. When a current of 20 mA AC (or less) is applied to the unit, the voltage read across the two leads shall be 15 VAC or less.
6. The LED modules shall provide constant light output under power. Modules with dimming capabilities shall have the option disabled or set on a non-dimming operation.
7. The individual LEDs shall be wired such that a catastrophic loss or the failure of one or more LED will not result in the loss of the entire module.

(d) Retrofit Traffic Signal Module

1. The following specification requirements apply to the Retrofit module only. All general specifications apply unless specifically superseded in this section.
2. Retrofit modules can be manufactured under this specification for the following faces:
 - a. 12 inch (300 mm) circular, multi-section
 - b. 12 inch (300 mm) arrow, multi-section
 - c. 12 inch (300 mm) pedestrian, 2 sections
3. Each Retrofit module shall be designed to be installed in the doorframe of a standard traffic signal housing. The Retrofit module shall be sealed in the doorframe with a one-piece EPDM (ethylene propylene rubber) gasket.
4. The maximum weight of a Retrofit module shall be 4 lbs. (1.8 kg).
5. Each Retrofit module shall be a sealed unit to include all parts necessary for operation (a printed circuit board, power supply, a lens and gasket, etc.), and shall be weather proof after installation and connection.
6. Electrical conductors for modules, including Retrofit modules, shall be 39.4 inches (1m) in length, with quick disconnect terminals attached.
7. The lens of the Retrofit module shall be integral to the unit, shall be convex with a smooth outer surface and made of plastic or of glass.

(e) The following specification requirements apply to the 12 inch (300 mm) arrow module only. All general specifications apply unless specifically superseded in this section.

1. The arrow module shall meet specifications stated in Section 9.01 of the Equipment and Material Standards of the Institute of Transportation Engineers (November 1998) [ITE Standards], Chapter 2 (Vehicle Traffic Control Signal Heads) for arrow indications.
2. The LEDs arrow indication shall be a solid display with a minimum of three (3) outlining rows of LEDs and at least one (1) fill row of LEDs.

(f) The following specification requirement applies to the 12 inch (300 mm) programmed visibility (PV) module only. All general specifications apply unless specifically superseded in this section.

1. The LED module shall be a module designed and constructed to be installed in a programmed visibility (PV) signal housing without modification to the housing.

(g) The following specification requirements apply to the 12 inch (300 mm) Pedestrian module only. All general specifications apply unless specifically superseded in this section.

1. Each pedestrian signal LED module shall provide the ability to actuate the solid upraised hand and the solid walking person on one 12 inch (300mm) section.
2. Two (2) pedestrian sections shall be installed. The top section shall be wired to illuminate only the upraised hand and the bottom section shall be the walking man.
3. "Egg Crate" type sun shields are not permitted. All figures must be a minimum of 9 inches (225mm) in height and easily identified from a distance of 120-feet (36.6m).

Basis of Payment.

This item shall be paid for at the contract unit price each for SIGNAL HEAD, LED, of the type specified, which price shall be payment in full for furnishing the equipment described above including signal head, LED(s) modules, all mounting hardware, and installing them in satisfactory operating condition.

The type specified will indicate the number of signal faces, the number of signal sections, and the method of mounting.

Pedestrian head(s) shall be paid for at the contract unit price each for PEDESTRIAN SIGNAL HEAD, LED, of the type specified and of the particular kind of material when specified.

The type specified will indicate the number of faces and the method of mounting.

When installed in an existing signal head, this item shall be paid for at the contract unit price each for SIGNAL HEAD, LED of the type specified, RETROFIT, which price shall be payment in full for furnishing the equipment described above including LED(s) modules, all mounting hardware, and installing them in satisfactory operating condition.

The type specified will indicate the number of signal faces, the number of signal sections, and the method of mounting.

When installed in an existing signal head, this item shall be paid for at the contract unit price each for PEDESTRIAN SIGNAL HEAD, LED, of the type specified, RETROFIT, which price shall be payment in full for furnishing the equipment described above including LED(s) modules, all mounting hardware, and installing them in satisfactory operating condition.

The type specified will indicate the number of faces and the method of mounting.

TABLES

Table 2 Maximum Power Consumption (in Watts)

	Red		Yellow		Green	
	25°C	74°C	25°C	74°C	25°C	74°C
12 inch (300 mm) circular	11	17	22	25	15	15
12 inch (300 mm) arrow	9	12	10	12	11	11
Pedestrian Indication	Hand-Portland Orange		Person-White			
	6.2		6.3			

Table 3 Minimum Initial & Maintained Intensities for Arrow and Pedestrian Indications (in cd/m²)

	Red	Yellow	Green
Arrow Indication	5,500	11,000	11,000

PEDESTRIAN COUNTDOWN SIGNAL HEAD, LIGHT EMITTING DIODE.

Description.

This work shall consist of furnishing and installing a pedestrian countdown signal head, with light emitting diodes (LED) of the type specified in the plan.

Pedestrian Countdown Signal Head, Light Emitting Diode, shall conform fully to the SIGNAL HEAD, LIGHT EMITTING DIODE specification, with the following modifications:

(a) Application.

1. Pedestrian Countdown Signal Heads, shall not be used at signalized intersections where traffic signals and railroad warning devices are interconnected.
2. All pedestrian signals at an intersection shall be the same type and have the same display. No mixing of countdown and other types of pedestrian traffic signals will be permitted.

(b) General.

1. The module shall operate in one mode: Clearance Cycle Countdown Mode Only. The countdown module shall display actual controller programmed clearance cycle and shall start counting when the flashing clearance signal turns on and shall countdown to "0" and turn off when the steady Upraised Hand (symbolizing Don't Walk) signal turns on. Module shall not have user accessible switches or controls for modification of cycle.
2. At power on, the module shall enter a single automatic learning cycle. During the automatic learning cycle, the countdown display shall remain dark.
3. The module shall re-program itself if it detects any increase or decrease of Pedestrian Timing. The counting unit will go blank once a change is detected and then take one complete pedestrian cycle (with no counter during this cycle) to adjust its buffer timer.
4. The module shall allow for consecutive cycles without displaying the steady Upraised Hand.
5. The module shall recognize preemption events and temporarily modify the crossing cycle accordingly.
6. If the controller preempts during the Walking Person (symbolizing Walk), the countdown will follow the controller's directions and will adjust from Walking Person to flashing Upraised Hand. It will start to count down during the flashing Upraised Hand.
7. If the controller preempts during the flashing Upraised Hand, the countdown will continue to count down without interruption.
8. The next cycle, following the preemption event, shall use the correct, initially programmed values.
9. If the controller output displays Upraised Hand steady condition and the unit has not arrived to zero or if both the Upraised Hand and Walking Person are dark for some reason, the unit suspends any timing and the digits will go dark.
10. The digits will go dark for one pedestrian cycle after loss of power of more than 1.5 seconds.
11. The countdown numerals shall be two (2) "7 segment" digits forming the time display utilizing two rows of LEDs.

12. The LED module shall meet the requirements of the Institute of Transportation Engineers (ITE) LED purchase specification, "Pedestrian Traffic Control Signal Indications - Part 2: LED Pedestrian Traffic Signal Modules," or applicable successor ITE specifications, except as modified herein.
13. The LED modules shall provide constant light output under power. Modules with dimming capabilities shall have the option disabled or set on a non-dimming operation.
14. In the event of a power outage, light output from the LED modules shall cease instantaneously.
15. The LEDs utilized in the modules shall be AlInGaP technology for Portland Orange (Countdown Numerals and Upraised Hand) and GaN technology for Lunar White (Walking Person) indications.
16. The individual LEDs shall be wired such that a catastrophic loss or the failure of one or more LED will not result in the loss of the entire module.

(c) Pedestrian Countdown Signal Heads.

1. Pedestrian Countdown Signal Heads shall be 16 inch (406mm) x 18 inch (457mm), for single units with the housings glossy black polycarbonate. Connecting hardware and mounting brackets shall be polycarbonate (black). A corrosion resistant anti-seize lubricant shall be applied to all metallic mounting bracket joints, and shall be visible to the inspector at the signal turn-on.
2. Each pedestrian signal LED module shall be fully MUTCD compliant and shall consist of double overlay message combining full LED symbols of an Upraised Hand and a Walking Person. "Egg Crate" type sun shields are not permitted. Numerals shall measure 9 inches (229mm) in height and easily identified from a distance of 120 feet (36.6m).

(d) Electrical.

1. Maximum power consumption for LED modules is 29 watts.
2. The measured chromaticity shall remain unchanged over the input line voltage range listed of 80 VAC to 135 VAC.

Basis of Payment.

This item shall be paid for at the contract unit price each for PEDESTRIAN COUNTDOWN SIGNAL HEAD, LED, of the type specified, which shall be payment in full for furnishing the equipment described above including LED(s) modules, all mounting hardware, and installing them in satisfactory operating condition. The type specified will indicate the number of faces and the method of mounting.

ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 16, 5½ PAIR

This work shall consist of furnishing and installing a Belden YC46223 communications cable, or approved equal, in existing and/or new conduit. This Belden cable has a color code that matches the MVP cable currently in use by the County. The cable shall consist of 16 AWG stranded bare copper twisted-pair conductors, with PVC insulation, and PVC jacket with nylon ripcord. The nominal outside diameter shall be 0.502-inch.

The communications cable, No. 16, 5½ pair shall be spliced to the MVP Cable in the base of the signal mast arm pole on which the MVP is mounted. The MVP cable shall be provided by the MVP manufacturer. The communications cable shall be provided by the Contractor. The conductors from the two cables shall be spliced using the 3M Scotchlok gel-filled splice tabs (part number 314). Each splice shall be individually protected with shrink tubing. The individual splices shall also be bundled together

and protected with shrink tubing. The cost of all work associated with splicing the cables shall be considered incidental to the cost of the communications cable, No. 16, 5½ pair.

Basis of Payment: This work will be paid for at the contract unit price per foot for ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5½ PAIR, which price shall be payment in full for furnishing, installing and making all electrical connections necessary for proper operation.

FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL.

This work shall consist of furnishing and installing an "Econolite" brand traffic actuated solid state digital controller (ASC3-2100) in a NEMA TS2 Type 1 controller cabinet, meeting the requirements of the Standard Specifications Section 857 and the included Traffic Signal Specifications.

Basis of Payment: This work shall be paid for at the contract unit price each for FULL-ACTUATED CONTROLLER AND CABINET (SPECIAL) of the type specified, which shall be payment in full for furnishing and installing the controller complete including conflict monitor, load switches and flasher relays, with necessary connections for proper operation.

The type specified will indicate the type of cabinet. For example, FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL).

VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION).

Note: The McHenry County Division of Transportation currently uses Autoscope Video Detection equipment.

VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION).

This specification sets forth the minimum requirements for a system that monitors vehicles on a roadway via processing of video images and provides detector outputs to a traffic controller or similar device. This work shall consist of furnishing and installing an Autoscope Solo Pro or approved equal video vehicle detection system at one signalized intersection, including all necessary hardware, cable and accessories necessary to complete the installation in accordance with the manufacturer's specifications.

The system shall consist of integrated machine vision processor sensors (MVPs), an electrical interface panel, and a detector interface card. The quantity of MVP sensors included with this pay item shall be as shown on the plans. The system shall also include a ten-inch color VGA monitor with BNC connector for video input. A simple multi-camera video switching unit shall be provided to select video input to the monitor. Vehicle detection zones shall be user-defined through interactive graphics by placing lines and/or boxes in an image on a VGA monitor. The system shall calculate traffic parameters in real-time and provide local non-volatile data storage for later downloading and analysis.

This specification defines the minimum requirements for a wide area video vehicle detection system consisting of 1 or more MVP sensors, 1 or more communications Mini-Hub modules and 1 or more MVP interface panels. All system components shall be manufactured using a Quality System that is ISO9002 registered. Written confirmation of ISO9002 registration shall be available from the manufacturer prior to bid acceptance if requested. As part of the video detection system the Contractor shall provide two copies of the most recent version of the video detection system software to the County as directed by the Engineer.

III. Introduction

The video vehicle detection system shall be easily configurable and expandable to meet traffic management applications such as intersection control, traffic monitoring, incident management, and traffic data collection. The system shall be composed of the following components:

- A machine vision processor (MVP) sensor that provides vehicle detection, JPEG video compression, and communications with other subsystems.
- Detector Interface Card (Mini-Hub TS-2)
- A Windows-based communications and Windows-based application software for setup and system configuration as well as continued monitoring and data collection, if required.
- Systems communications that shall operate over any appropriate serial communications links provided by the systems integrator.
- An integrated color camera, zoom lens, and machine vision processor all in one unit; direct real-time iris and shutter speed control; with single-frame, JPEG image compression.
- The system shall also have easily configured IP addressing for the MVP field network.

II. MVP Sensor

The MVP sensor shall combine an integrated imaging CCD array with zoom lens optics, high-speed, image-processing hardware and a general-purpose CPU bundled into a sealed and pressurized enclosure. The sensor shall be equipped with a sunshield to reflect solar heat and to shield the CCD array from direct exposure to the sun. The sensor shall also be equipped with a faceplate heater to melt accumulated ice, snow, or fog from the view of the camera. The general-purpose CPU shall directly control the optics and camera electronics.

The lens shall be pre-focused at the factory and shall not require field adjustment. The zoom optics shall maintain focus throughout the operating range from 7 to 74 degrees horizontal field of view (5 to 58 degrees vertical field of view). At an operator's request, the MVP sensor shall temporarily switch to surveillance mode operation, which allows the operator to zoom the lens.

The MVP sensor shall provide color analog video output at 30 frames a second, and shall process a minimum of twenty (20) detector zones placed anywhere in the field of view of the sensor. The analog video output shall provide graphics overlay that indicates the current real-time detection state.

MVP Sensor External Interfaces

The external interfaces to the MVP sensor shall include the following:

Network Connections Port

There shall be a field network communications port to configure and provide general communications and data retrieval. The MVP sensor shall use a full- or half-duplex, RS 485, 4-wire electrical network to facilitate communications with a Windows computer. This port shall be used to update the embedded software and to interact with applications software for the various detection requests supported by the MVP sensor.

Detector I/O Port

The MVP sensor detector port shall use a dedicated, RS-485 2-wire, half-duplex interface between The MVP sensor and the detector interface card also known as the detector port master (DPW) (i.e. Mini-Hub TS2). The real-time state of phase inputs shall be transmitted to The MVP sensor. The detector port master interface card shall subsequently translate the detection states to a traffic signal controller.

Differential Video

The MVP sensor shall output full motion, differential analog video over a single, twisted pair.

Power

The MVP sensor shall operate on 24 VAC, 50/60Hz or 24 VDC. The camera and processor electronics shall consume a maximum of 10 watts. The integrated faceplate heater shall consume a maximum of 5 watts.

MVP Sensor Vehicle Detection Requirements

The MVP sensor shall be able to be programmed with a variety of detector types, which can perform the following functions:

- Presence/passage detection of moving and stopped vehicles.
- Detection based on the direction of travel.
- Measure vehicle speed and length and provide five (5) classes of vehicles based on length.
- Detect incident shock waves using effective detection algorithms.
- Generate alarm status based on the detection of shock waves, wrong-way vehicles, stopped vehicles, red-light runners, or other operator-defined traffic conditions.
- Combine the output of multiple detectors with logical operators and modify the combined state based on delay or extension timers.

Detection Zone Programming

A VGA monitor shall display the detection zones superimposed on images of traffic scenes. A mouse and keyboard shall be used to place, size, and orient detection zones and edit previously defined detector configurations. It shall also be possible to download detector configurations from the computer to the MVP sensor and upload the current detector configuration that is running in the MVP sensor.

Count Detection Performance

Using an MVP sensor installed for optimal viewing, the system shall be able to accurately count vehicles with a least 96% accuracy under normal operation conditions (day and night), and at least 93% accuracy under artifact conditions. Artifact conditions are combinations of weather and lighting conditions that result from shadows, fog, rain, snow, etc. The volume count shall be accumulated for all travel lanes, and accumulated over time intervals that contain a minimum of 100 vehicles to ensure statistical significance.

Demand Presence Detection Performance

The system shall be able to accurately provide demand presence detection. The demand presence accuracy shall be based on the ability to enable a protected turning movement on an intersection stop line, when a demand exists. The probability of not detecting a vehicle for demand presence shall be less than 1-percent error under all operating conditions. In presence of artifact conditions, the MVP sensor shall minimize extraneous (false) protected movement calls to less than 7%.

Speed Detection Performance

The MVP sensor shall accurately measure average speed of multiple vehicles with more than 98% accuracy under all operation conditions for approaching and receding traffic. The MVP sensor shall accurately measure individual vehicle speeds with more than 95% accuracy under all operating conditions for vehicles approaching the sensor and 90% accuracy for vehicles receding from the sensor.

MVP Sensor Enclosure

The MVP sensor and lens assembly shall be housed in an environmental enclosure that provides the following capabilities:

- The enclosure shall be waterproof and dust-tight to NEMA-4 specifications, and shall be pressurized with dry nitrogen to 5 ± 1 psi.

- The enclosure shall allow The MVP sensor to operate satisfactorily over an ambient temperature range from -34 degrees C to +60 degrees C while exposed to precipitation as well as direct sunlight.
- The enclosure shall allow the image sensor horizon to be rotated during field installation.
- A faceplate heater shall prevent the formation of ice and condensation in cold weather.

MVP Sensor Electrical

All video connections from the sensor to the interface panel shall also be isolated from earth ground. The video output, communications, and power stages of the sensor shall include transient protection to prevent damage to the sensor. The MVP sensor shall meet CE, FCC, and UL requirements for safety and EMI.

Communications Panel Requirements

The communications interface panel shall provide a terminal block for terminating power, as well as terminations for two twisted-pair wires for network communications to the MVP sensor, one twisted-pair for video output from and MVP sensor, and one twisted-pair wires for detector port communications. The panel shall also provide two sets of terminations for two twisted-pair wires for a point-to-point field network. The communications interface panel shall also provide transient protection and a d DB9 connector for an optional traffic signal controller interface.

III. Detector Interface Card (Mini-Hub TS-2)

The system shall use a defined communication protocol (detector port protocol) between the MVP sensors and the Mini-Hub TS2. The protocol shall be used to communicate TS1 inputs pins, TS1 output pins, TS2 detector states, and TS2 phase states. The detector interface card shall be the master of the detector port (DPM) and the MVP sensors shall be the slaves. The DPM shall issue a command for a single or up to eight (8) MVP sensors to respond. The DPM shall exchange input and output state data with the MVP sensor every 100 ms. The DPM interface card shall subsequently translate the detection states to a traffic signal controller. Each input or output pin of an interface card shall have one associated LED output to reflect its input output state.

IV. Basis of Payment

This item will be paid for at the contractor unit price each for Video Detection System, which price shall be payment if full for furnishing all MVP sensors, mini-hubs, interface panels and associated equipment required, two copies of the most recent software for the video detection system, installing the system complete and in place, and placing the system in operation to the satisfaction of the engineer.



Route FAU 3869 Marked Haligus Road
 Section 06-00030-00-FP Project No. M-8003(641)
 County McHenry

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from Construction Site Activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jack

Signature

3-7-07

Date

PROJECT MANAGER

Title

1. Site Description

- a. The following is a description of the construction activity which is the subject of this plan (use additional pages, as necessary):
 This is a new roadway construction and existing roadway widening project along Haligus Road and Reed Road within the Village of Huntley in McHenry County. The work to be performed under this contract consists of earth excavation and pavement removal, construction of storm sewers and drainage structures, combination concrete curb and gutter, concrete and aggregate shoulder, hot-mix asphalt base, binder and surface courses, traffic signal installation, channelization with thermoplastic pavement markings, and all incidental and collateral work necessary to complete the project as shown on the plans and as described herein.
- b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading (use additional pages, as necessary):
 Stage 1 – Topsoil Stripping, Earth Excavation, Storm Sewer Installation, Subgrade Preparation along Haligus Road
 Stage 2 – Earth Excavation and Subgrade Preparation along Reed Road
 Stage 3 – Paving, Topsoil Placement, and Seed
- c. The total area of the construction site is estimated to be 8.4 acres.

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities is 6.8 acres.

- d. The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained either in the Soils Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.
- e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water.
- f. The names of receiving water(s) and areal extent of wetland acreage at the site are in the design/project report or plan documents which are incorporated by reference as a part of this plan.
The stormwater will drain to the existing retention ponds which are tributary to the 48" Regional Stormwater Drainage System. This storm sewer eventually drains to an unnamed tributary of the South Branch of the Kishwaukee River.

2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

a. Erosion and Sediment Controls

- (i) Stabilization Practices. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occur for a period of 21 or more calendar days.
 - (A) where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

Description of Stabilization Practices (use additional pages, as necessary):

Temporary Measures	Permanent Measures
Perimeter Erosion Barrier	Seeding, Class 1A
Temporary Ditch Checks	Seeding, Class 3
Temporary Erosion Control Seeding	Stone Riprap, Class A3
Erosion Control Blanket	

- (ii) **Structural Practices.** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Description of Structural Practices (use additional pages, as necessary):

Inlet filters will be installed at each existing and proposed open grate storm sewer structure to prevent sediment from being carried off of the job site thru the newly constructed or existing storm sewer. The filters will be cleaned when directed by the Engineer in order to optimize the performance of the filters. Stone riprap will be placed at the down stream outfalls of the connections to the existing retention ponds.

b. Storm Water Management

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

(i) Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on site; and sequential systems (which combine several practices). **The practices selected for implementation were determined on the basis of the technical guidance in Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.**

(ii) Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls (use additional pages, as necessary):

The proposed storm sewer will discharge into the existing retention ponds. The slopes of the pipes have been designed to reduce the velocity of the storm water as much as possible without causing siltation within the pipes. Stone riprap will be placed at the downstream ends to reduce erosion within the ponds. The ponds are under the maintenance of the respective property owners.

c. Other Controls

- (i) Waste Disposal. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- (ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

d. Approved State or Local Plans

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

All management practices, controls and other provisions provided in this plan are in accordance with IDOT Standard Specifications for Road and Bridge Construction and the Illinois Urban Manual. Specific procedures are shown on the Landscaping and Erosion Control Plan.

3. Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan (use additional pages, as necessary):

Construction equipment shall be stored and fueled only at designated locations as decided at the time of the pre-construction meeting. All necessary measures shall be taken to contain any fuel or pollution runoff in compliance with environmental law and EPA Water Quality Regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site. The Resident Engineer on a bi-weekly basis shall inspect the project to determine that erosion control measures are in place and operating effectively and if other measures may be necessary. Sediment collected during construction by the various erosion control measures shall be disposed of on a regular basis per the Engineer.

All erosion and sediment control measures will be checked weekly and after each significant rainfall. The following items will be checked: 1) Perimeter Erosion Barrier; 2) Tree Protection; 3) Inlet Filters; 4) Temporary Ditch Checks; 5) Inlet and Pipe Protection

All maintenance of the erosion and sediment control measures will be the Contractor's responsibility. All locations where vehicles enter and exit the construction site as well as all other areas subject to erosion will be inspected on a weekly basis and within 24 hours of a significant rainfall.

4. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution prevention measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.
- c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- d. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

5. Non-Storm Water Discharges

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge. (Use additional pages as necessary to describe non-storm water discharges and applicable pollution control measures).



**Illinois Department
of Transportation**

Contractor Certification Statement

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency on May 14, 1998.

Project Information:

Route FAU 3869

Marked Haligus Road

Section 06-00030-00-FP

Project No. M-8003(641)

County McHenry

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature

Date

Title

Name of Firm

Street Address

City State

Zip Code

Telephone Number

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF INTENT (NOI)
GENERAL PERMIT TO DISCHARGE STORM WATER
CONSTRUCTION SITE ACTIVITIES**

OWNER INFORMATION

NAME:	LAST Village of Huntley	FIRST	MIDDLE	(OR COMPANY NAME)	OWNER TYPE:	City
MAILING ADDRESS:	10987 Main Street					
CITY:	Huntley			STATE:	IL	ZIP: 60142
CONTACT PERSON:	Mr. Keith Schaedel			TELEPHONE NUMBER:	AREA CODE 847	NUMBER 669-3450

CONTRACTOR INFORMATION

NAME:	LAST	FIRST	MIDDLE	(OR COMPANY NAME)	TELEPHONE NUMBER:	AREA CODE	NUMBER
MAILING ADDRESS:				CITY:	STATE:	ZIP:	

CONSTRUCTION SITE INFORMATION

SELECT ONE:	<input checked="" type="checkbox"/> New Site <input type="checkbox"/> CHANGE OF INFORMATION TO PERMIT NO. ILR10_____								
FACILITY NAME:	FAU 3869(Haligus Road) Proj. # M-8003(641)			OTHER NPDES PERMIT NOS.:					
FACILITY LOCATION:	Algonquin Road to Reed Road			TELEPHONE NUMBER:	AREA CODE	NUMBER			
CITY:	Huntley	ST:	IL	ZIP:	60142	LATITUDE:	42 10 48	LONGITUDE:	88 24 12
COUNTY:	McHenry		SECTION:	27	TOWNSHIP:	43 N	RANGE:	7 E	
APPROX. CONST. START DATE:	/ /	APPROX. CONSTRUCTION END DATE:	/ /	TOTAL SIZE OF CONSTRUCTION SITE IN ACRES:			8.4		
STORM WATER POLLUTION PREVENTION PLAN COMPLETED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (If no, separate notification required to Agency prior to construction.)									

TYPE OF CONSTRUCTION

TYPE BRIEF DESCRIPTION OF PROJECT:	Transportation Roadway construction, roadway widening, and traffic signal installation.
------------------------------------	--

HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE

HAS THIS PROJECT SATISFIED APPLICABLE REQUIREMENTS FOR COMPLIANCE WITH ILLINOIS LAW ON:	
HISTORIC PRESERVATION	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
ENDANGERED SPECIES	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

RECEIVING WATER INFORMATION

DOES YOUR STORM WATER DISCHARGE DIRECTLY TO:	OWNER OF STORM SEWER SYSTEM:
<input type="checkbox"/> WATERS OF THE STATE OR <input checked="" type="checkbox"/> STORM SEWER	Village of Huntley
NAME OF CLOSEST RECEIVING WATER:	Unnamed tributary to the South Branch of the Kishwaukee River

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

OWNER SIGNATURE: _____ DATE: _____

MAIL COMPLETED FORM TO: (DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)	ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF WATER POLLUTION CONTROL ATTN: PERMIT SECTION POST OFFICE BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 www.epa.state.il.us	FOR OFFICE USE ONLY
		LOG:
		PERMIT NO. ILR10
		DATE:

Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

**INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI)
FORM**

Please adhere to the following instructions:

Submit original, photocopy or facsimile copies. Facsimile and/or photo copies should be followed-up with an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the lower right hand corner.

- ▶ **Submit completed forms to:**

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217)782-0610
www.epa.state.il.us

- ▶ Reports must be typed or printed legibly and signed.
- ▶ Any facility that is not presently covered by the ILR10 Construction Activity Storm Water Discharge General Permit is considered a new facility.
- ▶ If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line.
- ▶ **NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.**
- ▶ Use the formats given in the following examples for correct form completion.

	<u>Example</u>	<u>Format</u>
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W"

- ▶ For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."
- ▶ Submit a fee of \$500 prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
CONSTRUCTION SITE STORM WATER DISCHARGE
INCIDENCE OF NON-COMPLIANCE (ION)**

PERMITTEE NAME:	LAST	FIRST	MIDDLE INITIAL	AREA CODE + PHONE NUMBER:							
STREET:				CITY:	ST:	ZIP:					
CONSTRUCTION SITE NAME:											
COUNTY:				SECTION:	TOWNSHIP:	RANGE:					
NPDES PERMIT NUMBER:	I	L	R	1	0						
				LATITUDE:	DEG.	MIN.	SEC.	LONGITUDE:	DEG.	MIN.	SEC.

CAUSE OF NON-COMPLIANCE:

ACTIONS TAKEN TO PREVENT ANY FURTHER NON-COMPLIANCE:

ENVIRONMENTAL IMPACT RESULTING FROM THE NON-COMPLIANCE:

ACTIONS TAKEN TO REDUCE THE ENVIRONMENTAL IMPACT RESULTING FROM THE NON-COMPLIANCE:

SIGNATURE: _____ TITLE: _____ DATE: _____

MAIL COMPLETED FORM TO:
(DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

FOR OFFICE USE ONLY	
LOG:	
PERMIT NO. ILR10_____	
DATE:	

Information required by this form must be provided to comply with 415 ILCS 5/39(1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

**GUIDELINES FOR COMPLETION OF INCIDENCE OF NON-COMPLIANCE (ION)
FORM**

Complete and submit this form for any violation of the Storm Water Pollution Prevention Plan observed during any inspection conducted, including those not required by the Plan. Please adhere to the following guidelines.

- ▶ Submit original, photocopy or facsimile copies. Facsimile and/or photo copies should be followed-up with an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the lower right hand corner.

- ▶ Submit completed forms to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276

- ▶ Reports must be typed or printed legibly and signed.
- ▶ Use the formats given in the following examples for correct form completion.

<u>Example</u>		<u>Format</u>
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W"

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF TERMINATION (NOT)
OF COVERAGE UNDER THE GENERAL PERMIT
FOR STORM WATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION SITE ACTIVITIES

Please use the tab or arrow keys

OWNER INFORMATION

NAME:	LAST Village of Huntley	FIRST	MIDDLE	OWNER TYPE:	City
MAILING ADDRESS:	10987 Main Street				
CITY:	Huntley	STATE:	IL	ZIP:	60142
CONTACT PERSON:	Mr. Keith Schaedel	TELEPHONE NUMBER:	AREA CODE 847	NUMBER 669-3450	

CONTRACTOR INFORMATION

NAME:	LAST	FIRST	MIDDLE	TELEPHONE NUMBER:	AREA CODE	NUMBER
MAILING ADDRESS:		CITY:		STATE:		ZIP:

CONSTRUCTION SITE INFORMATION

FACILITY NAME:	FAU3869(Haligus Rd) Proj#M-8003(641)	OTHER NPDES PERMIT NOS.:	I	L	R	1	0						
FACILITY LOCATION:	Algonquin Road to Reed Road												
CITY:	Huntley	STATE:	IL	ZIP:	60142	LATITUDE:	42	10	48	LONGITUDE:	88	24	12
COUNTY:	McHenry	SECTION:	27	TOWNSHIP:	43 N	RANGE:	7 E						

DATE PROJECT HAS BEEN COMPLETED AND STABILIZED:

I certify under penalty of law that disturbed soils at the identified facility have been finally stabilized or that all storm water discharges associated with industrial activity from the identified facility that are authorized by an NPDES general permit have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with industrial activity by the general permit, and that discharging pollutants in storm water associated with industrial activity to Waters of the State is unlawful under the Environmental Protection Act and the Clean Water Act where the discharge is not authorized by an NPDES permit.

OWNER SIGNATURE: _____

DATE: _____

MAIL COMPLETED FORM TO:
 (DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF WATER POLLUTION CONTROL
 ATTN: PERMIT SECTION
 POST OFFICE BOX 19276
 SPRINGFIELD, ILLINOIS 62794-9276

FOR OFFICE USE ONLY

LOG:
PERMIT NO. ILR10 _____
DATE:

Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

GUIDELINES FOR COMPLETION OF NOTICE OF TERMINATION (NOT) FORM

Please adhere to the following guidelines:

Submit original, photocopy or facsimile copies. Facsimile and/or photo copies should be followed-up with an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the lower right hand corner.

- ▶ Submit completed forms to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

- ▶ Reports must be typed or printed legibly and signed.

- ▶ NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

- ▶ Use the formats given in the following examples for correct form completion.

	<u>Example</u>	<u>Format</u>
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W"

- ▶ Final stabilization has occurred when:

- (a) all soil disturbing activities at the site have been completed
- (b) a uniform perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures,
- (c) or equivalent permanent stabilization measures have been employed.

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 PLATE DRIVE UNIT 6
EAST DUNDEE, ILLINOIS 60118
(847) 844-1895 f(847) 844-3875

February 7, 2007

Mr. Jon Vana, P.E.
Civiltech Engineering, Inc.
450 E. Devon Avenue
Itasca, Illinois 60143

Re: Roadway Soils Survey
Haligus Road- Algonquin to Reed
Huntley, Illinois
MSET File No. 76285
Revised from November 30, 2006

Dear Mr. Vana:

We have completed the field exploration work and analysis of the subgrade conditions for proposed improvements on the referenced project. This report was prepared for your use in preparing the project design plans.

Purpose

The purpose of this exploration was to determine the types of soil encountered at the proposed subgrade elevation and to determine the presence of problem subgrade materials that may require special treatments. Using this information along with the project data provided, design criteria and recommendations for earthwork and subgrade treatment have been prepared for use by the Design Engineers in preparing the plans and specifications.

Scope

The scope of this exploration and analysis included review of available information from previous work conducted in the area, conducting a subsurface exploration, field and laboratory testing, analysis of the data obtained, formulation of our recommendations and preparation of this report. The field exploration included making two and nine (9) soil borings (B-1 through B-9) along the proposed alignment.

This report was prepared on the basis of the project information supplied by the client and is only intended for use on this project. Changes in the grades or alignment of the project should be submitted for our review since changes of this kind may cause changes in our recommendations. The report was prepared by interpreting the data from the test borings and field tests made along the proposed improvements and from the results of the laboratory tests on the subsoil samples taken from there. The report gives a representative, but not exhaustive, picture of the project subsoil make-up. The soil engineer warrants findings, recommendations, specifications, and/or professional advice to have been promulgated with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics, and engineering geology.

Reference Documents

This soils exploration and survey was performed in accordance with the State of Illinois, 'Geotechnical Manual' dated January 1, 1999.

PROJECT LOCATION AND DESCRIPTION

Project Location

The project is located in the N ½ of Section 27, T43N, R7E, Grafton Township, McHenry County, in the town of Huntley, Illinois. Refer to the Project Vicinity Maps, Figures 1 and 2, for project location.

Project Description

The project includes the construction of Haligus Road from Algonquin Road (Sta. 300+00) to Reed Road (Sta. 326+36), a total length of 2,636 lineal feet. The new alignment will be constructed on farmland most recently used for crops.

Climatological Data

The fieldwork for this soil survey was accomplished on October 24, 2006. The tables below lists the actual precipitation as measured at O'Hare International Airport by NOAA.

<u>Month</u>	<u>Actual Precipitation</u>	<u>Departure From Normal</u>
April, 2006	3.60"	-0.08"
May, 2006	3.65"	+0.27"
June, 2006	4.05"	+0.42"
July, 2006	3.70"	+0.19"
August, 2006	2.95"	-1.67"
September, 2006	5.71"	+2.44"
October, 2006	4.07"	+1.33"

In the period prior to the field work, rainfall was above average, Year to Date rainfall was 4.27" above normal at the end of October. While the soil profile is generally cohesive in nature, some seasonal groundwater may be encountered within silt and sand seams, stratum during periods of normal precipitation.

Site Geology

Geologically the project lies primarily within the Huntley Moraine, part of the Yorkville Member of the Wedron Formation. The soils are composed of gray to dark gray clayey till, with locally silt clayey till with small pebbles and local silt.

Surficial Soil Mapping

Soil Conservation Service mapping indicated Drummer Silt Loam (152) to be the predominant surficial soil deposit. In farmed areas, expect to encounter drain tiles. Saybrook Silt Loam is mapped on the south and north ends of the proposed alignment. The Drummer Soils are poorly drained and plastic in nature with Plasticity Index of 20 to 30. Saybrook Soils are

typically well drained and permeable.

General

The procedures for this exploration were conducted in general accordance with the appropriate Illinois Department of Transportation Standards. The borings were supervised at all times by a field engineer from the office of Midland Standard Engineering & Testing, Inc. The soil specimens obtained were transported to our laboratory for testing and analysis. All phases of this investigation have been directed by our Project Engineer.

Soil Drilling and Sampling Procedures

The soil borings were performed with a drilling rig equipped with a rotary head. Continuous flight augers were used to advance the holes. Representative samples of the upper profile soils were obtained by the use of split-spoon sampling methods in accordance with the ASTM procedure D 1586.

Strength Tests

A calibrated hand penetrometer was used to aid in determining the strength and consistency of cohesive soil samples (Q_p) in the field. Split spoon samples were subjected to unconfined compressive strength testing (Q_u) by the Rimac Method as modified by IDOT.

Water Level Measurements

Water level observations were made during and after the boring operations and are noted on the plan profiles presented herewith. In relatively pervious, sandy soils, the water level elevations would be considered reliable. In relatively impervious, clayey soils, the accurate determination of the groundwater elevation may not be possible, even after several days of observation. Seasonal variations, temperature and recent rainfall conditions may influence the levels of the groundwater table, and volumes of water will depend on the permeability of the soils.

Laboratory Testing

A supplemental testing program was conducted to ascertain additional pertinent engineering characteristics of the subgrade and foundation materials. The soils laboratory work was performed in accordance with applicable ASTM and IDOT standards. The laboratory test program included visual classification, unconfined compression testing and moisture content determination for each sample obtained.

The results of testing are presented in the Appendix to this report.

The soils encountered in the borings have been classified using both the IDOT Textural Classification System, and the AASHTO Engineering Soil Classification System (AASHTO, M-145) for the soil profile.

SUBSURFACE & SUBGRADE CONDITIONS

Subsurface Conditions

Materials encountered along the alignment are generally cohesive in nature, classified as Silty Clay to Silty Clay Loam, A-6. At boring B-4, Brown Sand, A-2 was encountered at a depth of 9.2'. A few intermittent wet sand seams were encountered in boring B-5 and B-8. The granular soil was moist with groundwater noted at 5.5' to 8.0' during drilling. Bedded seams and stratum of Silt Loam and Silt, A-4 to A-6 were encountered along the alignment, below the subgrade elevation.

Subgrade Conditions

The subgrade materials were generally found to be stiff to hard in consistency, with strengths, Q_u of 1.78 to 5.82 tons per square foot and moisture contents between 9 and 24%. The soils encountered below the subgrade were generally found to be stiff to hard in consistency, with unconfined compressive strengths (Q_u) of 1.16 to 7.36 tons per square foot and moisture contents between 9 and 28%. Details of the materials encountered and laboratory test results are presented on the Records of Subsurface Exploration and Soil Test Data BD-508A sheet included in the Appendix to this report.

Groundwater Conditions

Groundwater was encountered during drilling only at boring B-5 and B-8 at a depth of 8.0' and 5.5', respectively. Upon completion, groundwater was noted at depths of 7.5' and 9.6'. All borings were dry upon completion of the boring operations. After one (1) day, groundwater was noted from depths of 5.7' to 9.0'. Groundwater observations and cave in depths are noted on the boring logs.

Design Parameter Recommendations

Soils encountered as the predominant subgrade materials are considered to have a Subgrade Support Rating (SSR) of 'POOR' for full depth Bituminous and Rigid Pavement Design. Refer to Subgrade Support Rating (SSR) diagram located in the Appendix of this report. An Illinois Bearing ratio of 3.2 is considered appropriate for pavement design.

Frost Susceptibility of Subgrade Soils

The susceptibility of the subgrade soils to excessive frost action has been reviewed. The fine sand and silt content (61%) and Plasticity Index (23) is not considered to be frost susceptible.

Considering these and the lack of groundwater, embankments constructed with approved materials and properly drained pavements should not be considered susceptible to the detrimental effects of frost. However, the high plasticity materials located within a depth of 30" from the design subgrade should be considered for removal or remedial treatment.

General Earthwork and Roadway Subgrade Preparation

All earthwork excavation, backfill, embankment and subgrade preparation should be conducted in accordance with the requirements of Sections 200 and 300 of the current IDOT "Standard Specifications for Road and Bridge Construction".

Remedial Treatment Areas

All undercuts must be verified by cone penetrometer tests on the subgrade during construction in accordance with the guidelines in the Illinois Department of Transportation "Subgrade Stability Manual". Areas that were identified by the borings as needing additional treatment are summarized on the following tabulation.

Summary of Special Earthwork Remedial Treatment Areas

<u>Location</u>	<u>Replacement Indicated By</u>	<u>Depth¹</u>	<u>Treatment Width</u>	<u>Treatment Mat'l³</u>
Haligus Road Sta. 326+36 to Sta. 324+06 (B-1)	Qu=3.88 tsf N=14 bpf Mc=23%	No Treatment Indicated (Topsoil 17") ²		
Sta. 324+06 to Sta. 321+06 (B-2)	Qu=3.10 tsf Mc=24% N=10 bpf	No Treatment Indicated		
Sta. 321+06 to Sta. 318+06 (B-3)	Qu=5.82 tsf Mc=17% N=14 bpf	No Treatment Indicated (Topsoil 13") ²		
Sta. 318+06 to Sta. 315+06 (B-4)	Qu=2.01 tsf Mc=14% N=9 bpf	No Treatment Indicated		
Sta. 315+06 to Sta. 312+06 (B-5)	Qu=3.47 tsf Mc=9% N=13 bpf	No Treatment Indicated		
Sta. 312+06 to Sta. 309+06 (B-6)	Qu=2.95 tsf Mc=22% N=8 bpf	No Treatment Indicated		
Sta. 309+06 to Sta. 306+06 (B-7)	Qu=5.04 tsf Mc=14% N=13 bpf	No Treatment Indicated		
Sta. 306+06 to Sta. 303+06 (B-8)	Qu=1.78 Mc=23% N=11 bpf	10" (Topsoil 18") ²	Full Width	PGES or EMB
Sta. 303+06 to Sta. 300+00 (B-9)	Qu=5.56 tsf Mc=15% N=14 bpf	No Treatment Indicated		

continued

continued

1 = Depth refers to depth of remedial treatment below the design subgrade elevation.

2 = Depth refers to depth of remedial treatment below the existing grade elevation.

3 = Replacement Materials or Treatment:

Embankment Material and placement in accordance with Sections 205, 207 and
Reoccurring Special Provisions
EMB - Embankment (205)
PGES - Porous Granular Embankment Subgrade

Subgrade Treatment Plan Notes

Porous Granular Embankment, Subgrade (PGES) should be specified for use at the locations indicated for soils that tend to be unsuitable or unstable. The actual need for removal and replacement with PGES will be determined in the field at the time of construction by the geotechnical engineer. All potentially unstable soils should be tested with a static cone penetrometer and treated in accordance with Article 301.03 and the undercut guidelines in the IDOT Subgrade Stability Manual. If unstable and/or unsuitable material is encountered, the soil shall be removed and replaced with PGES or Embankment as determined by the geotechnical engineer. If unstable and/or unsuitable material is not encountered, then the quantity shall be deducted and no additional compensation will be due to the contractor. Transverse or longitudinal drains at the outside edge of the pavement may be installed at low points to drain the Aggregate Subgrade. Pipe underdrains should be installed in accordance with Section 601 of the Standard Specifications, adopted January 1, 2007, placed at a depth of 30 inches below the top of proposed pavement, in a wrapped fabric trench, backfilled with modified CA16 aggregate (Check Sheet #19 of the Recurring Special Provisions; adopted January 1, 2007).

It is recommended that a dain tile survey be conducted for the alignment, particularly in the predominant Drummer soils anticipated along most of the alignment. Where drain tiles are located, expect moist to wet and softened surface soils and undercut in isolated areas. A quantity of PGES and non-woven filter fabric should be included in the project plans for use in backfilling the undercut areas.

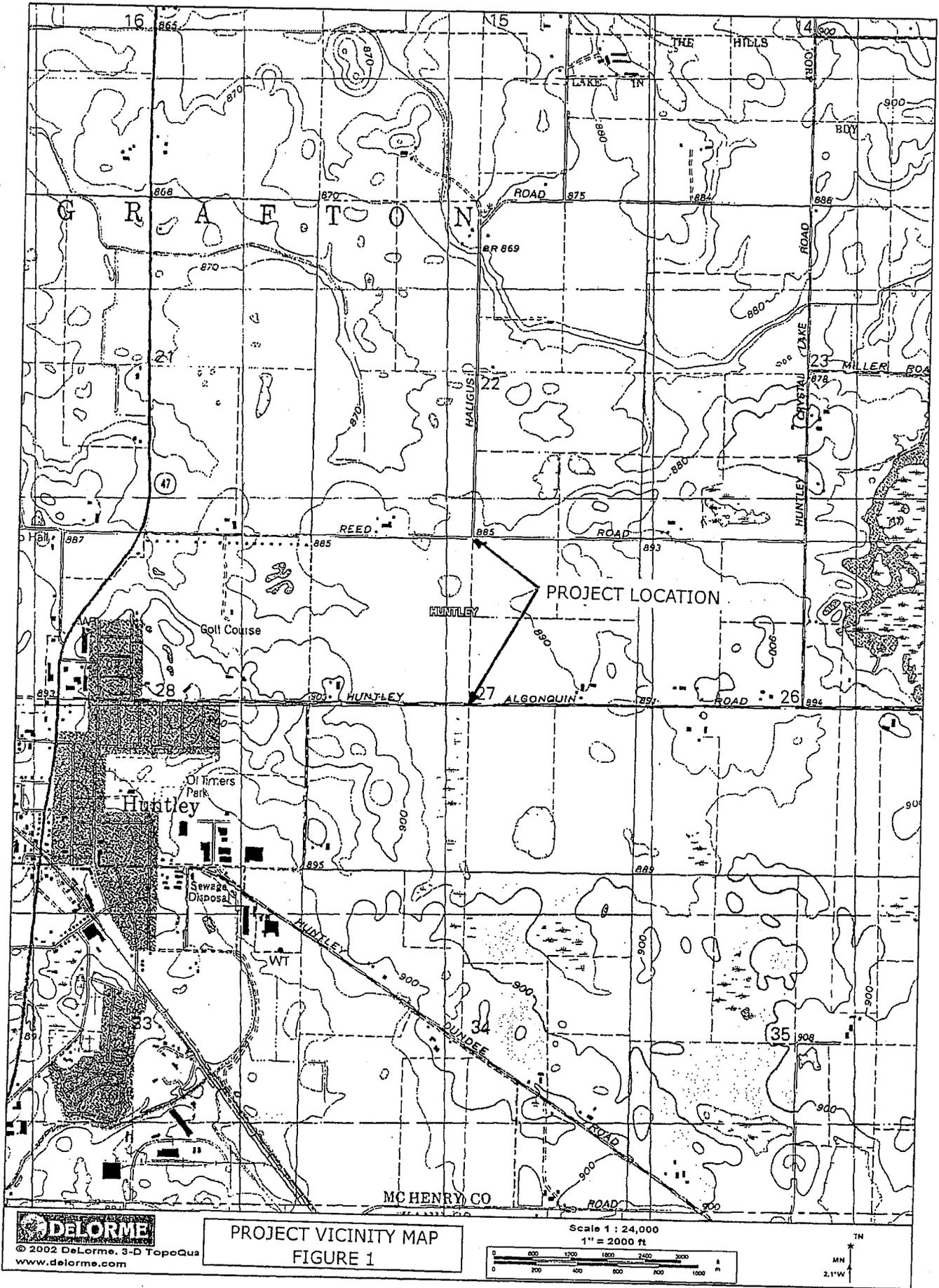
Closure

Thank you for the opportunity to be of continuing service. Please contact us if you have any questions regarding the information contained in this report.

Very truly yours,
MIDLAND STANDARD ENGINEERING & TESTING, INC.

William D. Prigge, P.E.
Principal

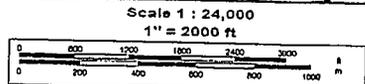
Appendix



DELORME

© 2002 DeLorme, 3-D TopoQua
www.delorme.com

PROJECT VICINITY MAP
FIGURE 1



TN
MN
2.1°W

APPENDIX

SOIL PROFILES
(Sheets 1 to 6)

RECORDS OF SUBSURFACE EXPLORATION
(B-1 through B-9)

SOIL TEST DATA SHEET BD-508A

SOIL COMPACTION TEST GRAPH

IBR TEST DATA

SUBGRADE SUPPORT RATING (SSR)

GENERAL NOTES

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 Plate Drive Unit 6 East Dundee, Illinois 60118 (847) 844-1895

RECORD OF SUBSURFACE EXPLORATION

BORING B-3 PAGE 1 OF 1

PROJECT NAME <u> Haligus Road Connector </u>	DATE STARTED <u> 10/24/06 </u>
MSET PROJECT NO. <u> 76285 </u>	DATE COMPLETED <u> 10/24/06 </u>
SITE LOCATION <u> Huntley, Illinois </u>	LOGGED BY <u> SE </u> BORING METHOD <u> CFA </u>
<u> Sta. 319+56, CL </u>	GW ENCOUNTERED WHILE DRILLING <u> none </u>
	GROUNDWATER, AT COMPLETION <u> dry </u>
	GROUNDWATER, AFTER <u> 1 </u> DAY <u> 9.0' </u>
	HOLE CAVED, <u> Dry </u> AT <u> 9.2' </u>

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	Qp	Wc	Remarks
882.3	SURFACE	Feet			LAB	FIELD	LAB	
	±13" Black Silty CLAY/TOPSOIL							
	Brown and Grey Silty CLAY, A-6		SS-1	14	5.82	4.0	17	
		5	SS-2	15	3.71	4.0	17	
	Brown-Grey		SS-3	13	2.87	3.0	15	
		10	SS-4	19	3.30	3.75	15	
	End of Boring @ 10.0'							

SYMBOLS

N: STANDARD PENETRATION, BLOWS/FT.
 Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT.
 Wc: WATER CONTENT, %
 LL: LIQUID LIMIT, %
 PI: PLASTICITY INDEX, %
 Dd: NATURAL DRY DENSITY, LBS./CU. FT.
 Qp: HAND PENETROMETER, TONS/SQ. FT.
 GW: GROUND WATER

SAMPLE DESIGNATION

SS- DRIVEN SPLIT SPOON 1 3/8" I.D., 2" O.D.
 ST- PRESSED SHELBY TUBE
 AU- AUGER SAMPLE
 RC- ROCK CORE - NXM
 BORING METHOD
 HSA- HOLLOW STEM AUGER
 CFA- CONTINUOUS FLIGHT AUGERS
 C- CASING
 MD- MUD DRILLING

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 Plate Drive Unit 6 East Dundee, Illinois 60118 (847) 844-1895

RECORD OF SUBSURFACE EXPLORATION

BORING B-5 PAGE 1 OF 1

PROJECT NAME <u>Haligus Road Connector</u>	DATE STARTED <u>10/24/06</u>
MSET PROJECT NO. <u>76285</u>	DATE COMPLETED <u>10/24/06</u>
SITE LOCATION <u>Huntley, Illinois</u>	LOGGED BY <u>SE</u> BORING METHOD <u>CFA</u>
<u>Sta. 313+56, CL</u>	GW ENCOUNTERED WHILE DRILLING <u>8.0'</u>
	GROUNDWATER, AT COMPLETION <u>7.5'</u>
	GROUNDWATER, AFTER <u>1</u> DAY <u>7.7'</u>
	HOLE CAVED, <u>wet</u> AT <u>8.0'</u>

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	Qp	Wc	Remarks
882.3	SURFACE	Feet			LAB	FIELD	LAB	
	±11" Black Silty CLAY/TOPSOIL							
	Brown and Grey Silty Clay LOAM, A-6		SS-1	13	3.47	3.5	9	
		5	SS-2	10	1.86	3.0	14	
	Brown and Grey Silt LOAM to SILT, A-6 grades to A-4		SS-3	8	--	0.5	22	
	few intermittent wet Sand seams							
		10	SS-4	15	--	--	21	
	End of Boring @ 10.0'							

<p>SYMBOLS</p> <p>N: STANDARD PENETRATION, BLOWS/FT. Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT. Wc: WATER CONTENT, % LL: LIQUID LIMIT, % PI: PLASTICITY INDEX, % Dd: NATURAL DRY DENSITY, LBS./CU. FT. Qp: HAND PENETROMETER, TONS/SQ. FT. GW: GROUND WATER</p>	<p>SAMPLE DESIGNATION</p> <p>SS- DRIVEN SPLIT SPOON 1 3/8" I.D., 2" O.D. ST- PRESSED SHELBY TUBE AU- AUGER SAMPLE RC- ROCK CORE - NXM BORING METHOD HSA- HOLLOW STEM AUGER CFA- CONTINUOUS FLIGHT AUGERS C- CASING MD- MUD DRILLING</p>
--	--

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 Plate Drive Unit 6 East Dundee, Illinois 60118 (847) 844-1895

RECORD OF SUBSURFACE EXPLORATION

BORING B-7 PAGE 1 OF 1

PROJECT NAME <u>Haligus Road Connector</u>	DATE STARTED <u>10/24/06</u>
MSET PROJECT NO. <u>76285</u>	DATE COMPLETED <u>10/24/06</u>
SITE LOCATION <u>Huntley, Illinois</u>	LOGGED BY <u>SE</u> BORING METHOD <u>CFA</u>
<u>Sta. 307+56, CL</u>	GW ENCOUNTERED WHILE DRILLING <u>none</u>
	GROUNDWATER, AT COMPLETION <u>dry</u>
	GROUNDWATER, AFTER <u>1</u> DAY <u>6.9'</u>
	HOLE CAVED, <u>wet</u> AT <u>7.3'</u>

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	Qp	Wc	Remarks
883.8	SURFACE	Feet			LAB	FIELD	LAB	
	<i>±15" Black Silty CLAY/TOPSOIL</i>							
	<i>Dark Brown to Yellow-Brown Silty Clay LOAM, A-6</i>		SS-1	13	5.04	2.75	14	
	<i>Dark Grey @ 4.6'</i>	5	SS-2	10	1.55	2.5	28	
	<i>Brown-Grey Silty CLAY, A-6</i>		SS-3	15	2.72	3.25	17	
		10	SS-4	25	3.71	4.5+	15	
	<i>End of Boring @ 10.0'</i>							

SYMBOLS

N: STANDARD PENETRATION, BLOWS/FT.
 Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT.
 Wc: WATER CONTENT, %
 LL: LIQUID LIMIT, %
 PI: PLASTICITY INDEX, %
 Dd: NATURAL DRY DENSITY, LBS./CU. FT.
 Qp: HAND PENETROMETER, TONS/SQ. FT.
 GW: GROUND WATER

SAMPLE DESIGNATION

SS- DRIVEN SPLIT SPOON 1 3/8" I.D., 2" O.D.
 ST- PRESSED SHELBY TUBE
 AU- AUGER SAMPLE
 RC- ROCK CORE - NXM
 BORING METHOD
 HSA- HOLLOW STEM AUGER
 CFA- CONTINUOUS FLIGHT AUGERS
 C- CASING
 MD- MUD DRILLING

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

95

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 Plate Drive Unit 6 East Dundee, Illinois 60118 (847) 844-1895

RECORD OF SUBSURFACE EXPLORATION

BORING B-8 PAGE 1 OF 1

PROJECT NAME Haligus Road Connector
 MSET PROJECT NO. 76285
 SITE LOCATION Huntley, Illinois
 Sta. 304+56, CL

DATE STARTED 10/24/06
 DATE COMPLETED 10/24/06
 LOGGED BY SE BORING METHOD CFA
 GW ENCOUNTERED WHILE DRILLING 5.5'
 GROUNDWATER, AT COMPLETION 9.6'
 GROUNDWATER, AFTER 1 DAY 5.7'
 HOLE CAVED, wet AT 6.3'

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	Qp	Wc	Remarks
886.0	SURFACE	Feet			LAB	FIELD	LAB	
	±18" Black Silty CLAY/TOPSOIL							
	Dark Brown Silty Clay LOAM to LOAM, A-6		SS-1	11	1.78	2.25	23	
	Brown to Yellow-Brown Sandy LOAM, A-4 to A-2	5	SS-2	26	--	--	10	
	Brown Silt LOAM, intermittent Sand seams, A-4, wet		SS-3	15	--	3.0	12	
	Brown Silty Clay LOAM to Silty CLAY, A-6							
	to Grey @ 9.0'	10	SS-4	20	3.72	4.5+	12	
	End of Boring @ 10.0'							

SYMBOLS

N: STANDARD PENETRATION, BLOWS/FT.
 Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT.
 Wc: WATER CONTENT, %
 LL: LIQUID LIMIT, %
 PI: PLASTICITY INDEX, %
 Dd: NATURAL DRY DENSITY, LBS./CU. FT.
 Qp: HAND PENETROMETER, TONS/SQ. FT.
 GW: GROUND WATER

SAMPLE DESIGNATION

SS- DRIVEN SPLIT SPOON 1 3/8" I.D., 2" O.D.
 ST- PRESSED SHELBY TUBE
 AU- AUGER SAMPLE
 RC- ROCK CORE - NXM
 BORING METHOD
 HSA- HOLLOW STEM AUGER
 CFA- CONTINUOUS FLIGHT AUGERS
 C- CASING
 MD- MUD DRILLING

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

MIDLAND STANDARD ENGINEERING & TESTING, INC.

558 Plate Drive Unit 6 East Dundee, Illinois 60118 (847) 844-1895

RECORD OF SUBSURFACE EXPLORATION

BORING B-9 PAGE 1 OF 1

PROJECT NAME <u> Halgus Road Connector </u> MSET PROJECT NO. <u> 76285 </u> SITE LOCATION <u> Huntley, Illinois </u> <u> Sta. 301+56, CL </u>	DATE STARTED <u> 10/24/06 </u> DATE COMPLETED <u> 10/24/06 </u> LOGGED BY <u> SE </u> BORING METHOD <u> CFA </u> GW ENCOUNTERED WHILE DRILLING <u> none </u> GROUNDWATER, AT COMPLETION <u> dry </u> GROUNDWATER, AFTER <u> 1 </u> DAY <u> 4.9' </u> HOLE CAVED, <u> wet </u> AT <u> 6.5' </u>
--	--

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	Qp	Wc	Remarks
888.6	SURFACE	Feet			LAB	FIELD	LAB	
	±16" Black Silty CLAY/TOPSOIL							
	Yellow-Brown and Grey Silty Clay LOAM, A-6		SS-1	14	5.56	3.5	15	
	Brown and Grey Silt LOAM, A-6 to A-4	5	SS-2	11	1.98	2.0	18	
	Brown Silty Clay LOAM, A-6		SS-3	14	2.02	2.5	20	
		10	SS-4	14	3.10	3.75	14	
	End of Boring @ 10.0'							

SYMBOLS

N: STANDARD PENETRATION, BLOWS/FT.
 Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT.
 Wc: WATER CONTENT, %
 LL: LIQUID LIMIT, %
 PI: PLASTICITY INDEX, %
 Dd: NATURAL DRY DENSITY, LBS./CU. FT.
 Qp: HAND PENETROMETER, TONS/SQ. FT.
 GW: GROUND WATER

SAMPLE DESIGNATION

SS- DRIVEN SPLIT SPOON 1 3/8" I.D., 2" O.D.
 ST- PRESSED SHELBY TUBE
 AU- AUGER SAMPLE
 RC- ROCK CORE - NXM
 BORING METHOD
 HSA- HOLLOW STEM AUGER
 CFA- CONTINUOUS FLIGHT AUGERS
 C- CASING
 MD- MUD DRILLING

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

MIDLAND STANDARD ENGINEERING & TESTING, INC.

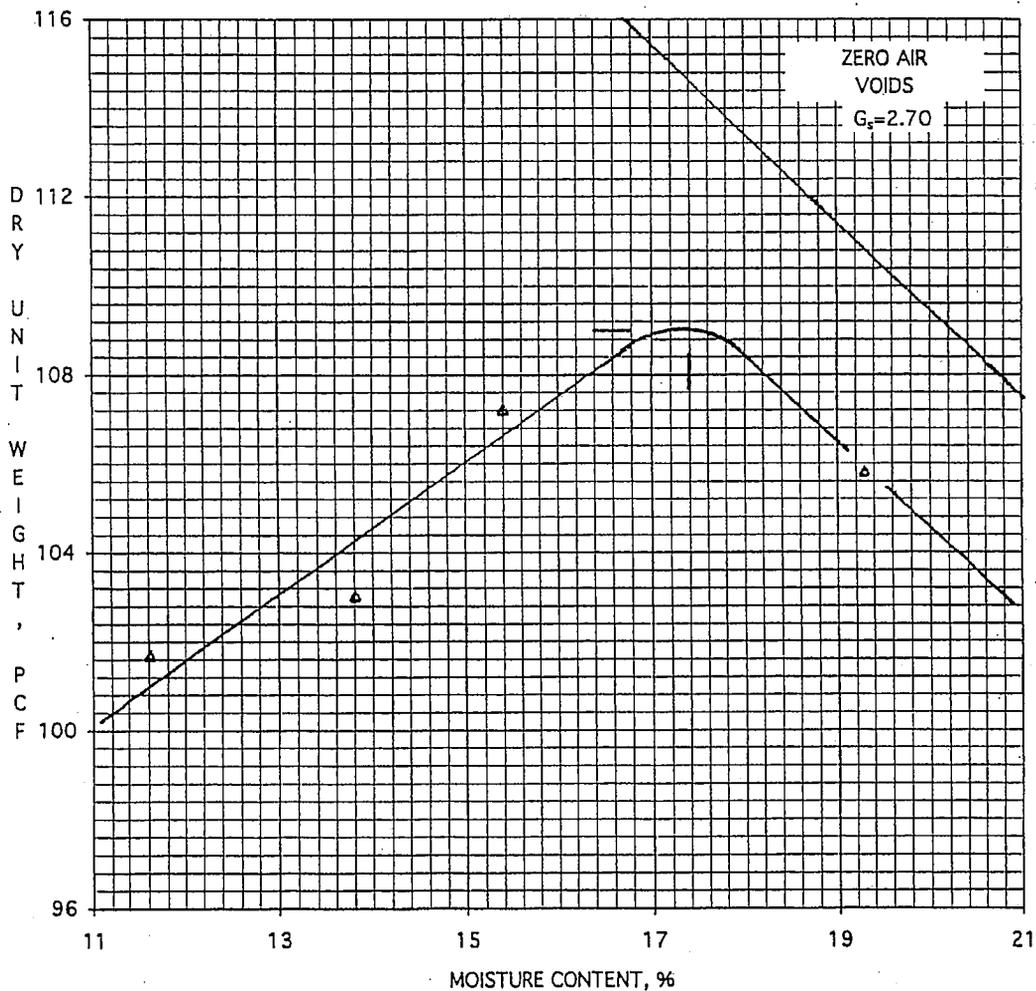
558 Plate Drive, Unit 6, East Dundee, IL 60118

SOIL COMPACTION TEST GRAPH

PROJECT: Haligus Road
 LOCATION: Huntley, IL
 CLIENT: Civiltech Engineering, Inc.

REPORT NO. 1 MDR
 DATE: 10/26/06
 OUR JOB NO. 76285

DESCRIPTION OF SOIL: Dk Grey and Yellow-Brown Clay LOAM A-6(13) RAMMER TYPE: MECHANICAL
 TEST PROCEDURE: ASTM D 698 LL-PL(PI): 39-(16)23 PREPARATION METHOD: DRY
 MATERIAL SOURCE: Boring #6 (1.0-4.0') Soil No. 1 MOISTURE CONTENT AS RECEIVED: 20.1%
 TEST RESULTS: MAXIMUM DRY DENSITY 109.0 PCF OPTIMUM MOISTURE 17.4%

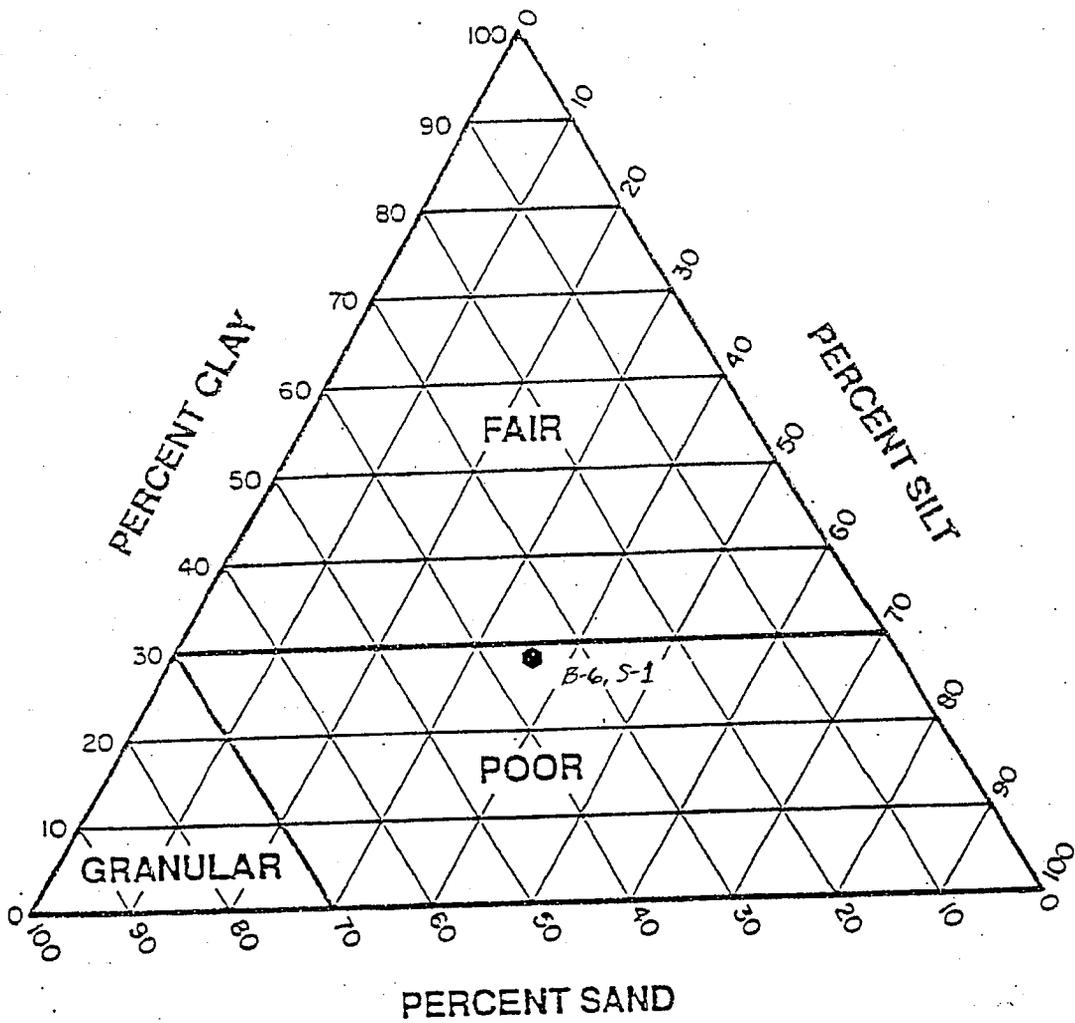


REMARKS: G_s determined by ASTM D 854. Oversize correction data, if used, is attached.

Date Received: 10-25-06

Date Tested: 10-26-06 By: JDS

Submitted: WDM PMG-68



Particle-Size Limits

Sand 2.000 - 0.075 mm

Silt 0.075 - 0.002 mm

Clay finer than 0.002 mm

Subgrade Support Rating (SSR)

GENERAL NOTES

PARTICLE SIZE DESCRIPTION & TERMINOLOGY

Coarse Grained or Granular Soils have more than 50% of their dry weight retained on a #200 sieve; they are described as: boulders, cobbles, gravel or sand. Fine Grained soils have less than 50% of their dry weight retained on a #200 sieve; they are described as: clays or clayey silts if they are cohesive and silts if they are non-cohesive. In addition to gradation, granular soils are defined on the basis of their relative in-place density and the fine grained soils on the basis of their strength or consistency and their plasticity.

Major Component of Sample	Size Range	Descriptive Term of Components Also Present in Sample	Approximate Quantity (Percent)
Boulders	Over 8 in. (200 mm)		
Cobbles	8 inches to 3 inches (200 mm to 75mm)	Trace	1 - 9
Gravel	3 inches to #10 sieve (75mm to 2.00mm)	Little	10 - 19
Sand	#10 to #200 sieve (2.00mm to 75mm)	Some	20 - 34
Silt	Passing #200 sieve (75mm to 2mm)	And	35 - 50
Clay	Smaller than 2mm		

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

GRANULAR SOILS

DENSITY CLASSIFICATION	APPROXIMATE RANGE OF N *
Very Loose	0 - 3
Slightly Dense	4 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 - 80
Extremely Dense	80 +

COHESIVE SOILS

CONSISTENCY	UNCONFINED COMPRESSIVE STRENGTH, Q_u - TSF	APPROXIMATE RANGE OF N *
Very Soft	0.25	0 - 2
Soft	0.25 - 0.49	3 - 4
Firm	0.50 - 0.99	5 - 8
Stiff	1.00 - 1.99	9 - 15
Very Stiff	2.00 - 3.99	16 - 30
Hard	4.00 - 8.00	31 - 50
Very Hard	8.00 +	Over 50

* **STANDARD PENETRATION TEST (ASTM D1586)** - A 2.0" outside-diameter, split barrel sampler is driven into undisturbed soil by means of a 140 pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven 3 successive 6 inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).

ELECTRIC CABLE AERIAL SUSPENDED, COMMUNICATION, NO. 16, 5½ PAIR

This work shall consist of furnishing and installing a Belden YC46223 communications cable, or approved equal, on existing and/or new span wire. This Belden cable has a color code that matches the MVP cable currently in use by the County. The cable shall consist of 16 AWG stranded bare copper twisted-pair conductors, with PVC insulation, and PVC jacket with nylon ripcord. The nominal outside diameter shall be 0.502-inch.

The communications cable, No. 16, 5½ pair shall be spliced to the MVP Cable in the base of the signal mast arm pole on which the MVP is mounted. The MVP cable shall be provided by the MVP manufacturer. The communications cable shall be provided by the Contractor. The conductors from the two cables shall be spliced using the 3M Scotchlok gel-filled splice tabs (part number 314). Each splice shall be individually protected with shrink tubing. The individual splices shall also be bundled together and protected with shrink tubing. The cost of all work associated with splicing the cables shall be considered incidental to the cost of the communications cable, No. 16, 5½ pair.

Basis of Payment: This work will be paid for at the contract unit price per foot for ELECTRIC CABLE AERIAL SUSPENDED, COMMUNICATION NO. 16, 5½ PAIR, which price shall be payment in full for furnishing, installing and making all electrical connections necessary for proper operation.

TRAFFIC SIGNAL WOOD POLE, 45 FT, CLASS 5

Description.

This work shall consist of furnishing and installing a wood pole as shown on the plans, including all necessary hardware and accessories required for the intended temporary or permanent use of the pole.

Materials.

Materials shall be according to Article 1077.04 (Traffic Signal Wood Pole) of the State of Illinois "Standard Specifications for Road and Bridge Construction."

Installation.

The depth of the pole in the ground shall not be less than 20 percent of the pole length with a minimum of 6 ft. With span wire type installations, down guys or sidewalk guys shall be installed as shown on the plans, and the pole shall be raked 1 ft. The backfill shall be tamped and compacted around the pole in 6 in. layers.

Basis of Payment.

The work for traffic signal wood poles will be paid for at the contract unit price each for TRAFFIC SIGNAL WOOD POLE of the length and class specified.

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION
FOR
COOPERATION WITH UTILITIES

Effective: January 1, 1999
Revised: January 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

Replace Article 105.07 of the Standard Specifications with the following:

105.07 Cooperation with Utilities. The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.

(a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:

- (1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 ft) distant at right angles from the plan or revised slope limits.

In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 1.2 m (4 ft) outside the edges of structure footings or the structure where no footings are required.

- (2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
- (3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.

(b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:

- (1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.
- (2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION
FOR
INSURANCE

Effective: February 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27 the following entities:

Village of Huntley, its employees and agents

Village of Lake in the Hills, its employees and agents

McHenry County, the McHenry County Division of Transportation, its employees and agents

Civiltech Engineering, Inc., its employees and agents

Commonwealth Edison Company, its employees and agents

The entities listed above will be indemnified and held harmless in accordance with Article 107.26.

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006

Revised: January 2, 2007

Description. For projects with at least 1200 tons (1100 metric tons) of work involving applicable bituminous materials, cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and pavement preservation type surface treatments. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

$$CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$$

- Where: CA = Cost Adjustment, \$.
- BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).
- BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).
- %AC_V = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.
- Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: $Q, \text{ tons} = A \times D \times (G_{mb} \times 46.8) / 2000$. For HMA mixtures measured in square meters: $Q, \text{ metric tons} = A \times D \times (G_{mb} \times 24.99) / 1000$. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_V.

For bituminous materials measured in gallons: $Q, \text{ tons} = V \times 8.33 \text{ lb/gal} \times SG / 2000$

For bituminous materials measured in liters: $Q, \text{ metric tons} = V \times 1.0 \text{ kg/L} \times SG / 1000$

- Where: A = Area of the HMA mixture, sq yd (sq m).
- D = Depth of the HMA mixture, in. (mm).
- G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.
- V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(BPI_L - BPI_P) \div BPI_L\} \times 100$$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
BITUMINOUS MATERIALS COST ADJUSTMENTS**

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract?

Yes

No

Signature: _____ **Date:** _____

80173

CEMENT (BDE)

Effective: January 1, 2007

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

1001.01 Cement Types. Cement shall be according to the following.

- (a) Portland Cement. Acceptance of portland cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland cement shall be according to ASTM C 150, and shall meet the standard physical and chemical requirements. Type I or Type II may be used for cast-in-place, precast, and precast prestressed concrete. Type III may be used according to Article 1020.04, or when approved by the Engineer. All other cements referenced in ASTM C 150 may be used when approved by the Engineer.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement and the total of all inorganic processing additions shall be a maximum of 4.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids that improve the flowability of cement, reduce pack set, and improve grinding efficiency. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302 and Class C fly ash according to the chemical requirements of AASHTO M 295.

- (b) Portland-Pozzolan Cement. Acceptance of portland-pozzolan cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland-pozzolan cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IP or I(PM) may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The pozzolan constituent for Type IP shall be a maximum of 21 percent of the weight (mass) of the portland-pozzolan cement. All other cements referenced in ASTM C 595 may be used when approved by the Engineer.

For cast-in-place construction, portland-pozzolan cements shall only be used from April 1 to October 15.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall not be used.

- (c) Portland Blast-Furnace Slag Cement. Acceptance of portland blast-furnace slag cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland blast-furnace slag cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type I(SM) slag-modified portland cement may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. All other cements referenced in ASTM C 595 may be used when approved by the Engineer.

For cast-in-place construction, portland blast-furnace slag cements shall only be used from April 1 to October 15.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall not be used.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.

(1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.

(2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.

(3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.

(4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.

(5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to Illinois Modified AASHTO T 161, Procedure B. At 100 cycles, the specimens are measured and weighed at 73 °F (23 °C).

- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used when specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The

chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al_2O_3), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO_3), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.

1001.02 Uniformity of Color. Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.

1001.03 Mixing Brands and Types. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.

1001.04 Storage. Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

80166

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (DBE)

Effective: September 1, 2000

Revised: January 1, 2007

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR part 26 and listed in the DBE Directory or most recent addendum.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that the Contractor signs with a subcontractor:

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE firms performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of

DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 15 % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

- (a) The bidder documents that firmly committed DBE participation has been obtained to meet the goal; or
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders may consult the DBE Directory as a reference source for DBE companies certified by the Department. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's web site at www.dot.il.gov.

BIDDING PROCEDURES. Compliance with the bidding procedures of this Special Provision is required prior to the award of the contract and the failure of the as-read low bidder to comply will render the bid not responsive.

- (a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven working days after the date of letting. To meet the seven day requirement, the bidder may send the Plan by certified mail or delivery service within the seven working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the

project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The name and address of each DBE to be used;
 - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;
 - (3) The price to be paid to each DBE for the identified work specifically stating the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
 - (4) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
 - (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five working day period in order to cure the deficiency.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to

count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE firm does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt to meet the goal. This means that the bidder must show

that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.

(1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

(2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.

(3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

(4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the

ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
 - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
 - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will designate a five working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.
- (c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five working days after the notification date of the determination by delivering the request to the Department of Transportation, Bureau of

Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to

find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.

- (c) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefor to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

DOWEL BARS (BDE)

Effective: April 1, 2007

Revise the fifth sentence of Article 1006.11(b) of the Standard Specifications to read:

"The bars shall be epoxy coated according to AASHTO M 284, except the thickness of the epoxy shall be 7 to 12 mils (0.18 to 0.30 mm)."

80178

ELECTRICAL SERVICE INSTALLATION - TRAFFIC SIGNALS (BDE)

Effective: January 1, 2007

Add the following to Article 805.02 of the Standard Specifications:

"(d) Wood Pole 1069.04"

Add the following to Article 805.03 of the Standard Specifications:

"When a service pole is necessary, it shall be installed according to Article 830.03(c)."

80167

EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007

Revise Article 105.03(a) of the Standard Specifications to read:

"(a) Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the deficiency. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for Construction Site Activities. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day."

80180

ERRATA FOR THE 2007 STANDARD SPECIFICATIONS (BDE)

Effective: January 1, 2007

Revised: April 1, 2007

Page 60 Article 109.07(a). In the second line of the first paragraph change "amount" to "quantity".

Page 207 Article 406.14. In the second line of the second paragraph change "MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS, of the mixture composition specified;" to "MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS;".

Page 345 Article 505.08(l). In the third line of the first paragraph change "1/8 mm" to "1/8 in.".

Page 345 Article 505.08(l). In the nineteenth line of the first paragraph change "is" to "in".

Page 383 Article 516.04(b)(1). In the fifth line of the first paragraph change "drillingpouring" to "pouring".

Page 390 Article 520.02(h). Change "1027.021" to "1027.01".

Page 398 Article 540.07(b). Add the following two paragraphs after the third paragraph:

"Excavation in rock will be measured for payment according to Article 502.12.

Removal and disposal of unstable and/or unsuitable material below plan bedding grade will be measured for payment according to Article 202.07."

Page 398 Article 540.08. Add the following two paragraphs after the fifth paragraph:

"Excavation in rock will be paid for according to Article 502.13.

Removal and disposal of unstable and/or unsuitable material below plan bedding grade will be paid for according to Article 202.08."

Page 435 Article 542.04(b). Delete the last sentence of the last paragraph.

Page 465 Article 551.06. In the second line of the first paragraph change "or" to "and/or".

Page 585 Article 701.19(a). Add "701400" to the second line of the first paragraph.

Page 586 Article 701.19(c). Delete "701400" from the second line of the first paragraph.

Page 586 Article 701.19. Add the following subparagraph to this Article:

"(f) Removal of existing pavement markings and raised reflective pavement markers will be measured for payment according to Article 783.05."

- Page 587 Article 701.20(b). Delete "TRAFFIC CONTROL AND PROTECTION 701400;" from the first paragraph.
- Page 588 Article 701.20. Add the following subparagraph to this Article.
- "(j) Removal of existing pavement markings and raised reflective pavement markers will be paid for according to Article 783.06."
- Page 762 Article 1020.04. In Table 1 Classes of Portland Cement Concrete and Mix Design Criteria, add to the minimum cement factor for Class PC Concrete "5.65 (TY III)", and add to the maximum cement factor for Class PC Concrete "7.05 (TY III)".
- Page 765 Article 1020.04. In Table 1 Classes of Portland Cement Concrete and Mix Design Criteria (metric), add to the minimum cement factor for Class PC Concrete "335 (TY III)", and add to the maximum cement factor for Class PC Concrete "418 (TY III)".
- Page 800 Article 1030.05(a)(12). Revise "Dust Collection Factor" to "Dust Correction Factor".
- Page 800 Article 1030.05(a)(14). Revise the first occurrence of Article 1030.05(a)(14) to Article 1030.05(a)(13).
- Page 809 Article 1030.05. Revise the subparagraph "(a) Quality Assurance by the Engineer." to read "(e) Quality Assurance by the Engineer."
- Page 946 Article 1080.03(a)(1). In the third line of the first paragraph revise "(300 μ m)" to "(600 μ m)".
- Page 963 Article 1083.02(b). In the second line of the first paragraph revise "ASTM D 4894" to "ASTM D 4895".
- Page 1076 In the Index of Pay Items delete the pay item "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".

80168

HOT-MIX ASPHALT EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE)

Effective: January 1, 2005

Revised: January 1, 2007

Revise the fourth paragraph of Article 1102.03 of the Standard Specifications to read:

“The paver shall be equipped with a receiving hopper having sufficient capacity for a uniform spreading operation. The hopper shall be equipped with a distribution system to uniformly place a non-segregated mixture in front of the screed. The distribution system shall have chain curtains, deflector plates, and /or other devices designed and built by the paver manufacturer to prevent segregation during distribution of the mixture from the hopper to the paver screed. The Contractor shall submit a written certification that the devices recommended by the paver manufacturer to prevent segregation have been installed and are operational. Prior to paving, the Contractor, in the presence of the Engineer, shall visually inspect paver parts specifically identified by the manufacturer for excessive wear and the need for replacement. The Contractor shall supply a completed check list to the Engineer noting the condition of the parts. Worn parts shall be replaced. The Engineer may require an additional inspection prior to placement of the surface course or at other times throughout the work.”

80142

NOTIFICATION OF REDUCED WIDTH (BDE)

Effective: April 1, 2007

Add the following after the first paragraph of Article 701.06 of the Standard Specifications:

"Where the clear width through a work zone with temporary concrete barrier will be 16.0 ft (4.88 m) or less, the Contractor shall notify the Engineer at least 21 days in advance of implementing the traffic control for that restriction."

80182

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000

Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section

| 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

80022

PRECAST CONCRETE HANDLING HOLES (BDE)

Effective: January 1, 2007

Add the following to Article 540.02 of the Standard Specifications:

“(g) Handling Hole Plugs 1042.16”

Add the following paragraph after the sixth paragraph of Article 540.06 of the Standard Specifications:

“Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar.”

Add the following to Article 542.02 of the Standard Specifications:

“(ee) Handling Hole Plugs 1042.16”

Revise the fifth paragraph of Article 542.04(d) of the Standard Specifications to read:

“Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation.”

Add the following to Article 550.02 of the Standard Specifications:

“(o) Handling Hole Plugs 1042.16”

Replace the fourth sentence of the fifth paragraph of Article 550.06 of the Standard Specifications with the following:

“Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation.”

Add the following to Article 602.02 of the Standard Specifications:

“(p) Handling Hole Plugs 1042.16(a)”

Replace the fifth sentence of the first paragraph of Article 602.07 of the Standard Specifications with the following:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Section 1042 of the Standard Specifications:

"1042.16 Handling Hole Plugs. Plugs for handling holes in precast concrete products shall be as follows.

- (a) Precast Concrete Plug. The precast concrete plug shall have a tapered shape and shall have a minimum compressive strength of 3000 psi (20,700 kPa) at 28 days.
- (b) Polyethylene Plug. The polyethylene plug shall have a "mushroom" shape with a flat round top and a stem with three different size ribs. The plug shall fit snugly and cover the handling hole.

The plug shall be according to the following.

Mechanical Properties	Test Method	Value (min.)
Flexural Modulus	ASTM D 790	3300 psi (22,750 kPa)
Tensile Strength (Break)	ASTM D 638	1600 psi (11,030 kPa)
Tensile Strength (Yield)	ASTM D 638	1200 psi (8270 kPa)

Thermal Properties	Test Method	Value (min.)
Brittle Temperature	ASTM D 746	-49 °F (-45 °C)
Vicat Softening Point	ASTM D 1525	194 °F (90 °C)"

80171

RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007

Revised: April 1, 2007

In Article 1030.02(g), delete the last sentence of the first paragraph in (Note 2).

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

1031.01 Description. Reclaimed asphalt pavement (RAP) is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

1031.02 Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District to provide verification of the quality of the RAP to clarify appropriate stockpile.

- (a) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (b) Conglomerate 5/8. Conglomerate 5/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 5/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate 5/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (c) Conglomerate 3/8. Conglomerate 3/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least B quality. This RAP may have an

inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 3/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 3/8 in. (9.5 mm) or smaller screen. Conglomerate 3/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

(d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low ESAL), or equivalent mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

(e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

1031.03 Testing. When used in HMA, the RAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

(a) Testing Conglomerate 3/8. In addition to the requirements above, conglomerate 3/8 RAP shall be tested for maximum theoretical specific gravity (G_{mm}) at a frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

- (b) Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	Homogeneous / Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %
1/2 in. (12.5 mm)	± 8 %	± 15 %
No. 4 (4.75 mm)	± 6 %	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 μm)	± 5 %	
No. 200 (75 μm)	± 2.0 %	± 4.0 %
Asphalt Binder	± 0.4 % ^{1/}	± 0.5 %
G_{mm}	± 0.02 % ^{2/}	

1/ The tolerance for conglomerate 3/8 shall be ± 0.3 %.

2/ Applies only to conglomerate 3/8. When variation of the G_{mm} exceeds the ± 0.02 % tolerance, a new conglomerate 3/8 stockpile shall be created which will also require an additional mix design.

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content test results fall outside the appropriate tolerances, the RAP shall not be used in HMA unless the RAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

1031.04 Quality Designation of Aggregate in RAP. The quality of the RAP shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

- (a) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) surface mixtures are designated as containing Class B quality coarse aggregate.
- (b) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder and IL-9.5L surface mixtures are designated as Class D quality coarse aggregate.
- (c) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.

(d) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

1031.05 Use of RAP in HMA. The use of RAP in HMA shall be as follows.

- (a) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (b) Steel Slag Stockpiles. RAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) surface mixtures only.
- (c) Use in HMA Surface Mixtures (High and Low ESAL). RAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be either homogeneous or conglomerate 3/8, in which the coarse aggregate is Class B quality or better.
- (d) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be homogeneous, conglomerate 5/8, or conglomerate 3/8, in which the coarse aggregate is Class C quality or better.
- (e) Use in Shoulders and Subbase. RAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be homogeneous, conglomerate 5/8, conglomerate 3/8, or conglomerate DQ.
- (f) The use of RAP shall be a contractor's option when constructing HMA in all contracts. When the contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table for a given N Design.

Max RAP Percentage

HMA MIXTURES ^{1/, 3/}	MAXIMUM % RAP		
	Ndesign	Binder/Leveling Binder	Surface
30	30	30	10
50	25	15	10
70	15 / 25 ^{2/}	10 / 15 ^{2/}	10
90	10	10	10
105	10	10	10

1/ For HMA Shoulder and Stabilized Sub-Base (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.

2/ Value of Max % RAP if 3/8 RAP is utilized.

- 3/ When RAP exceeds 20%, the high & low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25% RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

1031.06 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP material meeting the above detailed requirements.

RAP designs shall be submitted for volumetric verification. If additional RAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

1031.07 HMA Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP and either switch to the virgin aggregate design or submit a new RAP design. When producing mixtures containing conglomerate 3/8 RAP, a positive dust control system shall be utilized.

HMA plants utilizing RAP shall be capable of automatically recording and printing the following information.

(a) Dryer Drum Plants.

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- (4) Accumulated dry weight of RAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- (5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

- (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- (7) Residual asphalt binder in the RAP material as a percent of the total mix to the nearest 0.1 percent.
- (8) Aggregate and RAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP are printed in wet condition.)

(b) Batch Plants.

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- (4) Mineral filler weight to the nearest pound (kilogram).
- (5) RAP weight to the nearest pound (kilogram).
- (6) Virgin asphalt binder weight to the nearest pound (kilogram).
- (7) Residual asphalt binder in the RAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.08 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Other". The testing requirements of Article 1031.03 shall not apply.
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

80172

REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007

Revise the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

"At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange.

Initial Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material				
Observation Angle (deg.)	Entrance Angle (deg.)	White	Orange	Fluorescent Orange
0.2	-4	365	160	150
0.2	+30	175	80	70
0.5	-4	245	100	95
0.5	+30	100	50	40"

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

"Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

"The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

80183

REINFORCEMENT BARS (BDE)

Effective: November 1, 2005

Revised: January 1, 2007

Revise Article 1006.10(a) of the Standard Specifications to read:

"(a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reinforcement Bar and Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.

(1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706 (A 706M), Grade 60 (420) for deformed bars and the following.

a. Chemical Composition. The chemical composition of the bars shall be according to the following table.

CHEMICAL COMPOSITION		
Element ^{1/}	Heat Analysis (% maximum)	Product Analysis (% maximum)
Carbon	0.30	0.33
Manganese	1.50	1.56
Phosphorus	0.035	0.045
Sulfur	0.045	0.055
Silicon	0.50	0.55
Nickel	^{2/}	^{2/}
Chromium	^{2/}	^{2/}
Molybdenum	^{2/}	^{2/}
Copper	^{2/}	^{2/}
Titanium	^{2/}	^{2/}
Vanadium	^{2/}	^{2/}
Columbium	^{2/}	^{2/}
Aluminum	^{2/} , ^{3/}	^{2/} , ^{3/}
Tin ^{4/}	0.040	0.044

Note 1/. The bars shall not contain any traces of radioactive elements.

Note 2/. There is no composition limit but the element must be reported.

Note 3/. If aluminum is not an intentional addition to the steel for deoxidation or killing purposes, residual aluminum content need not be reported.

Note 4/. If producer bar testing indicates an elongation of 15 percent or more and passing of the bend test, the tin composition requirement may be waived.

- b. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
 - c. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706 (A 706M). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
 - d. Spiral Reinforcement. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.
- (2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284 (M 284M) and the following.
- a. Certification. The epoxy coating applicator shall be certified under the Concrete Reinforcing Steel Institute's (CRSI) Epoxy Plant Certification Program.
 - b. Coating Thickness. The thickness of the epoxy coating shall be 7 to 12 mils (0.18 to 0.30 mm). When spiral reinforcement is coated after fabrication, the thickness of the epoxy coating shall be 7 to 20 mils (0.18 to 0.50 mm).
 - c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 0.5 in. (13 mm) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

80151

RETROREFLECTIVE SHEETING, NONREFLECTIVE SHEETING, AND TRANSLUCENT OVERLAY FILM FOR HIGHWAY SIGNS (BDE)

Effective: April 1, 2007

General. This special provision covers retroreflective sheeting and translucent overlay films intended for application on new or refurbished aluminum. The sheeting serves as the reflectorized background for sign messages and as cutout legends and symbols applied to the reflectorized background. Messages may be applied in opaque black or transparent colors.

This special provision also covers nonreflective sheeting for application on new or refurbished aluminum, and as material for cutout legends and symbols applied to the reflectorized background.

All material furnished under this specification shall have been manufactured within 18 months of the delivery date. All material shall be supplied by the same manufacturer.

Retroreflective Sheeting Properties. Retroreflective sheeting shall consist of a flexible, colored, prismatic, or glass lens elements adhered to a synthetic resin, encapsulated by a flexible, transparent plastic having a smooth outer surface and shall meet the following requirements.

Only suppliers whose products have been tested and approved in the Department's periodic Sheeting Study will be eligible to supply material. All individual batches and or lots of material shall be tested and approved by the Department. The Department reserves the right to sample and test delivered materials according to Federal Specification LS-300.

- (a) Adhesive. The sheeting shall have a Class 1, pre-coated, pressure sensitive adhesive according to ASTM D 4956. The adhesive shall have a protective liner that is easily removed when tested according to ASTM D 4956. The adhesive shall be capable of being applied to new or refurbished aluminum and reflectorized backgrounds without additional adhesive.
- (b) Color. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration and to the daytime and nighttime color requirements of ASTM D 4956. Sheeting used for side by side overlay applications shall have a Hunter Lab Delta E of less than 3.
- (c) Coefficient of Retroreflection. When tested according to ASTM E 810, without averaging, the sheeting shall have a minimum coefficient of retroreflection as shown in the following tables. The brightness of the sheeting when totally wet shall be a minimum of 90 percent of the values shown when tested according to the standard rainfall test specified in Section 7.10.1 of AASHTO M 268-84.

Type A Sheeting
Minimum Coefficient of Retroreflection
candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type A

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Orange	Red	Green	Blue	Brown
0.2	-4	250	170	100	45	45	20	12
0.2	+30	150	100	60	25	25	12	8.5
0.5	-4	95	65	30	15	15	8	5
0.5	+30	75	50	25	10	10	5	3.5

Type AA Sheeting

Minimum Coefficient of Retroreflection
candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AA (0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FO
0.2	-4	800	660	215	80	43	200
0.2	+30	400	340	100	35	20	120
0.5	-4	200	160	45	20	9.8	80
0.5	+30	100	85	26	10	5.0	50

Type AA (45 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	Yellow	FO
0.2	-4	550	165
0.2	+30	130	45
0.5	-4	145	70
0.5	+30	70	40

Type AP Sheeting

Minimum Coefficient of Retroreflection
candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AP

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	Brown	FO
0.2	-4	550	425	100	75	50	30	275
0.2	+30	200	150	40	35	25	15	90
0.5	-4	300	250	60	35	25	20	150
0.5	+30	100	70	20	20	10	5	50

Type AZ Sheeting
Minimum Coefficient of Retroreflection
candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AZ (0 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	430	350	110	45	20	325	240
0.2	+30	235	140	60	24	11	200	150
0.5	-4	250	200	60	25	10	235	165
0.5	+30	170	135	40	19	7	105	75
1.0	-4	70	45	10	10	4	70	30
1.0	+30	30	20	7	5	2.5	45	15

Type AZ (90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	320	250	100	45	20	300	220
0.2	+30	235	140	40	24	11	200	150
0.5	-4	240	200	60	25	10	235	165
0.5	+30	100	85	20	10	7	80	75
1.0	-4	30	30	7	5	4	65	20
1.0	+30	15	15	5	2	2	30	10

(d) Gloss. The sheeting surface shall exhibit a minimum 85 degree gloss-meter rating of 50 when tested according to ASTM D 523.

(e) Durability. When processed and applied, the sheeting shall be weather resistant.

Accelerated weathering testing will be performed for 1000 hours (300 hours for orange/FO) according to ASTM G 151. The testing cycle will consist of 8 hours of light at 140 °F (60 °C), followed by 4 hours of condensation at 104 °F (40 °C). Following accelerated weathering, the sheeting shall exhibit a minimum of 80 percent of its initial minimum coefficient of retroreflection as listed in the previous tables.

Outdoor weathering will entail an annual evaluation of material placed in an outdoor rack with a 45 degree angle and a southern sun exposure. The sheeting will be evaluated for five years. Following weathering, the test specimens will be cleaned by immersing them in a five percent hydrochloric acid solution for 45 seconds, then rinsed with water and blotted dry with a soft clean cloth. Following cleaning, the applied sheeting shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change. The sheeting shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

- (f) Shrinkage. When tested according to ASTM D 4956, the sheeting shall not shrink in any dimension more than 1/32 in. (0.8 mm) in ten minutes and not more than 1/8 in. (3 mm) in 24 hours.
- (g) Workability. The sheeting shall show no cracking, scaling, pitting, blistering, edge lifting, inter-film splitting, curling, or discoloration when processed and applied using mutually acceptable processing and application procedures.
- (h) Splices. A single roll of sheeting shall contain a maximum of four splices per 50 yd (45 m) length. The sheeting shall be overlapped a minimum of 3/16 in. (5 mm) at each splice.
- (i) Adhesive Bond. The sheeting shall form a durable bond to smooth, corrosion and weather-resistant surfaces and adhere securely when tested according to ASTM D 4956.
- (j) Positionability. Sheeting, with ASTM D 4956 Class 3 adhesive, used for manufacturing cutout legends and borders shall provide sufficient positionability during the fabrication process to permit removal and reapplication without damage to either the legend or sign background and shall have a plastic liner suitable for use on bed cutting machines. Thereafter, all other adhesive and bond requirements contained in the specification shall apply.

Positionability shall be verified by cutting 4 in. (100 mm) letters E, I, K, M, S, W, and Y out of the positionable material. The letters shall then be applied to a sheeted aluminum blank using a single pass of a two pound roller. The letters shall sit for five minutes and then a putty knife shall be used to lift a corner. The thumb and fore finger shall be used to slowly pull the lifted corner to lift letters away from the sheeted aluminum. The letters shall not tear or distort when removed.

- (k) Thickness. The thickness of the sheeting without the protective liner shall be less than or equal to 0.015 in. (0.4 mm), or 0.025 in. (0.6 mm) for prismatic material.
- (l) Processing. The sheeting shall permit cutting and color processing according to the sheeting manufacturer's specifications at temperatures of 60 to 100 °F (15 to 38 °C) and within a relative humidity range of 20 to 80 percent. The sheeting shall be heat resistant and permit forced curing without staining the applied or unapplied sheeting at temperatures recommended by the manufacturer. The sheeting shall be solvent resistant and capable of being cleaned with VM&P naphtha, mineral spirits, and turpentine.

Transparent color and opaque black inks shall be single component and low odor. The inks shall dry within eight hours and not require clear coating. After color processing on white sheeting, the sheeting shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change when tested for durability (e). The ink on the weathered, prepared panel shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

Transparent color electronic cutting films shall be acrylic. After application to white sheeting, the films shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change when tested for durability (e). The films on the weathered, prepared panel shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

Transparent colors screened, or transparent acrylic electronic cutting films, on white sheeting, shall have a minimum initial coefficient of retroreflection values of 50 percent for yellow and red, and a minimum 70 percent for green, blue, and brown of the 0.2 degree observation angle/-4.0 degree entrance angle values as listed in the previous tables for the color being applied. After durability testing, the colors shall retain a minimum 80 percent of the initial coefficient of retroreflection.

- (m) Identification. The sheeting shall have a distinctive overall pattern in the sheeting unique to the manufacturer. If material orientation is required for optimum retroreflectivity, permanent orientation marks shall be incorporated into the face of the sheeting. Neither the overall pattern nor the orientation marks shall interfere with the reflectivity of the sheeting.
- (n) Packaging. Both ends of each box shall be clearly labeled with the sheeting type, color, adhesive type, manufacturer's lot number, date of manufacture, and supplier's name. Material Safety Data Sheets and technical bulletins for all materials shall be furnished to the Department with each shipment.

Nonreflective Sheeting Properties. Nonreflective sheeting shall consist of a flexible, pigmented cast vinyl film having a smooth, flat outer surface and shall meet the following requirements.

The Department reserves the right to sample and test delivered materials according to Federal Specification LS-300.

- (a) Adhesive. The sheeting shall have a Class 1, pre-coated, pressure sensitive adhesive according to ASTM D 4956. The adhesive shall have a protective liner that is easily removed when tested according to ASTM D 4956. The adhesive shall be capable of being applied to new or refurbished aluminum and reflectorized backgrounds without additional adhesive.
- (b) Color. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll.
- (c) Gloss. The sheeting shall exhibit a minimum 85 degree gloss-meter rating of 40 when tested according to ASTM D 523.
- (d) Durability. Applied sheeting that has been vertically exposed to the elements for seven years shall show no appreciable discoloration, cracking, crazing, blistering, delamination, or loss of adhesion. A slight amount of chalking is permitted but the sheeting shall not support fungus growth.

(e) Testing. Test panels shall be prepared by applying the sheeting to 6 1/2 x 6 1/2 in. (165 x 165 mm) pieces of aluminum according to the manufacturer's specifications. The edges of the panel shall be trimmed evenly and aged 48 hours at 70 to 90 °F (21 to 32 °C). Shrinkage and immersion testing shall be as follows.

(1) Shrinkage. The sheeting shall not shrink more than 1/64 in. (0.4 mm) from any panel edge when subjected to a temperature of 150 °F (66 °C) for 48 hours and shall be sufficiently heat resistant to retain adhesion after one week at 150 °F (66 °C).

(2) Immersion Testing. The sheeting shall show no appreciable decrease in adhesion, color, or general appearance when examined one hour after being immersed to a depth of 2 or 3 in. (50 or 75 mm) in the following solutions at 70 to 90 °F (21 to 32 °C) for specified times.

Solution	Immersion Time (hours)
Reference Fuel (M I L-F-8799A) (15 parts xylol and 85 parts mineral spirits by weight)	1
Distilled Water	24
SAE No. 20 Motor Oil	24
Antifreeze (1/2 ethylene glycol, 1/2 distilled water)	24

(f) Adhesive Bond: The sheeting shall form a durable bond to smooth, corrosion and weather-resistant surfaces and adhere securely when tested according to ASTM D 4956.

(g) Thickness. The thickness of the sheeting without the protective liner shall be a maximum of 0.005 in. (0.13 mm).

(h) Cutting. Material used on bed cutting machines shall have a smooth plastic liner.

(i) Identification. The sheeting shall have a distinctive overall pattern in the sheeting unique to the manufacturer. If material orientation is required for optimum retroreflectivity, permanent orientation marks shall be incorporated into the face of the sheeting. Neither the overall pattern nor the orientation marks shall interfere with the reflectivity of the sheeting.

(j) Packaging. Both ends of each box shall be clearly labeled with the sheeting type, color, adhesive type, manufacturer's lot number, date of manufacture, and supplier's name. Material Safety Data Sheets and technical bulletins for all materials shall be furnished to the Department with each shipment.

SEEDING (BDE)

Effective: July 1, 2004

Revised: January 1, 2007

Revise the following seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

"Table 1 - SEEDING MIXTURES		
Class – Type	Seeds	lb/acre (kg/hectare)
2 Roadside Mixture 7/	Inferno Tall Fescue, Tarheel II Tall Fescue, or Quest Tall Fescue Perennial Ryegrass Creeping Red Fescue Red Top	100 (110) 50 (55) 40 (50) 10 (10)
2A Salt Tolerant Roadside Mixture 7/	Inferno Tall Fescue, Tarheel II Tall Fescue, or Quest Tall Fescue Perennial Ryegrass Audubon Red Fescue Rescue 911 Hard Fescue Fults Salt Grass 1/	60 (70) 20 (20) 30 (20) 30 (20) 60 (70)"

Revise Table II of Article 1081.04(c)(6) of the Standard Specifications to read:

TABLE II						
Variety of Seeds	Hard Seed	Purity	Pure Live	Weed	Secondary *	Notes
	% Max.	% Min.	Seed % Min.	% Max.	Noxious Weeds No. per oz (kg) Max. Permitted	
Alfalfa	20	92	89	0.50	6 (211)	1/
Clover, Alsike	15	92	87	0.30	6 (211)	2/
Audubon Red Fescue	0	97	82	0.10	3 (105)	-
Fescue, Creeping Red	-	97	82	1.00	6 (211)	-
Fescue, Inferno Tall	0	98	83	0.10	2 (70)	-
Fescue, Tarheel II Tall	-	97	82	1.00	6 (211)	-
Fescue, Quest Tall	0	98	83	0.10	2 (70)	-
Fults Salt Grass	0	98	85	0.10	2 (70)	-
Kentucky Bluegrass	-	97	80	0.30	7 (247)	4/
Oats	-	92	88	0.50	2 (70)	3/
Redtop	-	90	78	1.80	5 (175)	3/
Ryegrass, Perennial, Annual	-	97	85	0.30	5 (175)	3/
Rye, Grain, Winter	-	92	83	0.50	2 (70)	3/
Rescue 911 Hard Fescue	0	97	82	0.10	3 (105)	-
Timothy	-	92	84	0.50	5 (175)	3/
Wheat, hard Red Winter	-	92	89	0.50	2 (70)	3/

Revise the first sentence of the first paragraph of Article 1081.04(c)(7) of the Standard Specifications to read:

"The seed quantities indicated per acre (hectare) for Prairie Grass Seed in Classes 3, 3A, 4, 4A, 6, and 6A in Article 250.07 shall be the amounts of pure, live seed per acre (hectare) for each species listed."

80131

SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)

Effective: November 1, 2005

Revised: January 1, 2007

Definition. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

Usage. Self-consolidating concrete may be used for cast-in-place concrete construction items involving Class MS, DS, and SI concrete.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. Article 1020.04 of the Standard Specifications shall apply, except as follows:

- (a) The cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m). The cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used.
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations: CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

Test Methods. Illinois Test Procedures SCC-1, SCC-2, SCC-3, SCC-4, SCC-5, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

Mix Design Submittal. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

A J-ring value shall be submitted if a lower mix design maximum will apply. An L-box blocking ratio shall be submitted if a higher mix design minimum will apply. The Contractor shall also indicate applicable construction items for the mix design.

| Trial mixture information will be required by the Engineer. A trial mixture is a batch of concrete tested by the Contractor to verify the Contractor's mix design will meet specification requirements. Trial mixture information shall include test results as specified in the "Portland Cement Concrete Level III Technician" course manual. Test results shall also include slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index. For the trial mixture, the slump flow shall be near the midpoint of the proposed slump flow target range.

| Trial Batch. A minimum 2 cu yd (1.5 cu m) trial batch shall be produced, and the self-consolidating concrete admixture dosage proposed by the Contractor shall be used. The slump flow shall be within 1.0 in. (25 mm) of the maximum slump flow range specified by the Contractor, and the air content shall be within the top half of the allowable specification range.

The trial batch shall be scheduled a minimum of 21 calendar days prior to anticipated use and shall be performed in the presence of the Engineer.

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

| A new trial batch will be required whenever there is a change in the source of any component material, proportions beyond normal field adjustments, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

Mixing Portland Cement Concrete. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

Falsework and Forms. In addition to Articles 503.05 and 503.06 of the Standard Specifications, the Contractor shall consider the fluid nature of the concrete for designing the falsework and forms. Forms shall be tight to prevent leakage of fluid concrete.

Placing and Consolidating. Concrete placement and consolidation shall be according to Article 503.07 of the Standard Specifications, except as follows:

Revise the third paragraph of Article 503.07 of the Standard Specifications to read:

"Open troughs and chutes shall extend as nearly as practicable to the point of deposit. The drop distance of concrete shall not exceed 5 ft (1.5 m). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted."

Delete the seventh, eighth, ninth, and tenth paragraphs of Article 503.07 of the Standard Specifications.

Add to the end of the eleventh paragraph of Article 503.07 of the Standard Specifications the following:

"Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer."

Quality Control by Contractor at Plant. The specified test frequencies for aggregate gradation, aggregate moisture, air content, unit weight/yield, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and hardened visual stability index test will not be required to be performed at the plant.

Quality Control by Contractor at Jobsite. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 50 cu yd (40 cu m) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite. The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 300 cu yd (230 cu m) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

If mix foaming or other potential detrimental material is observed during placement or at the completion of the pour, the material shall be removed while the concrete is still plastic.

Quality Assurance by Engineer at Plant. For air content and aggregate gradation, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

Quality Assurance by Engineer at Jobsite. For air content and strength, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 1.5 in. (40 mm) for slump flow and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will

include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 1.5 in. (40 mm) for the J-ring value and ten percent for the L-box blocking ratio.

For each hardened visual stability index test performed by the Contractor, the cut cylinders shall be presented to the Engineer for determination of the rating. The Engineer reserves the right to conduct quality assurance split sample testing. A limit of precision will not apply to the hardened visual stability index.

80152

SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004

Revised: January 1, 2007

Definition. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

Usage. Self-consolidating concrete may be used for precast concrete products.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. The mix design criteria shall be as follows:

- (a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m).
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements of Article 1020.04 of the Standard Specifications shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

Placing and Consolidating. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer.

Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

Mix Design Approval. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

80132

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

80143

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002

Revised: January 1, 2007

Revise the second sentence of the first paragraph of Article 280.04(a) of the Standard Specifications to read:

"Temporary ditch checks shall be constructed with rolled excelsior, products from the Department's approved list, or with aggregate when specified."

Revise Article 1081.15(f) of the Standard Specifications to read:

"(f) Rolled Excelsior. Rolled excelsior shall consist of an excelsior fiber filling totally encased inside netting and sealed with metal clips or knotted at the ends. Each roll shall be a minimum of 20 in. (500 mm) in diameter and a minimum of 10 ft (3 m) in length. Each 10 ft (3 m) roll shall have a minimum weight (mass) of 30 lbs (13.6 kg). The excelsior fiber filling shall be weed free. At least 80 percent of the fibers shall be a minimum of 6 in. (150 mm) in length. The fiber density shall be a minimum of 1.38 lb/cu ft (22 kg/cu m). The netting shall be composed of a polyester or polypropylene material which retains 70 percent of its strength after 500 hours of exposure to sunlight. The maximum opening of the net shall be 1 x 1 in. (25 x 25 mm)."

80087

THERMOPLASTIC PAVEMENT MARKINGS (BDE)

Effective: January 1, 2007

Revise Article 1095.01(a)(2) of the Standard Specifications to read:

"(2) Pigment. The pigment used for the white thermoplastic compound shall be a high-grade pure (minimum 93 percent) titanium dioxide (TiO_2). The white pigment content shall be a minimum of ten percent by weight and shall be uniformly distributed throughout the thermoplastic compound.

The pigments used for the yellow thermoplastic compound shall not contain any hazardous materials listed in the Environmental Protection Agency Code of Federal Regulations (CFR) 40, Section 261.24, Table 1. The combined total of RCRA listed heavy metals shall not exceed 100 ppm when tested by X-ray fluorescence spectroscopy. The pigments shall also be heat resistant, UV stable and color-fast yellows, golds, and oranges, which shall produce a compound which shall match Federal Standard 595 Color No. 33538. The pigment shall be uniformly distributed throughout the thermoplastic compound."

Revise Article 1095.01(b)(1)e. of the Standard Specifications to read:

"e. Daylight Reflectance and Color. The thermoplastic compound after heating for four hours \pm five minutes at 425 ± 3 °F (218.3 ± 2 °C) and cooled at 77 °F (25 °C) shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degree circumferential/zero degree geometry, illuminant C, and two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

White: Daylight Reflectance75 percent min.

*Yellow: Daylight Reflectance45 percent min.

*Shall meet the coordinates of the following color tolerance chart.

x	0.490	0.475	0.485	0.530
y	0.470	0.438	0.425	0.456"

Revise Article 1095.01(b)(1)k. of the Standard Specifications to read:

"k. Accelerated Weathering. After heating the thermoplastic for four hours \pm five minutes at 425 ± 3 °F (218.3 ± 2 °C) the thermoplastic shall be applied to a steel wool abraded aluminum alloy panel (Federal Test Std. No. 141, Method 2013) at a film thickness of 30 mils (0.70 mm) and allowed to cool for 24 hours at room temperature. The coated panel shall be subjected to accelerated weathering

using the light and water exposure apparatus (fluorescent UV - condensation type) for 75 hours according to ASTM G 53 (equipped with UVB-313 lamps).

The cycle shall consist of four hours UV exposure at 122 °F (50 °C) followed by four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the panel shall not exceed 10 Hunter Lab Delta E units from the original material."

80176

TRAINING SPECIAL PROVISIONS (BDE) This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 1. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

BASIS OF PAYMENT This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

20338

WATER BLASTER WITH VACUUM RECOVERY (BDE)

Effective: April 1, 2006

Revised: January 1, 2007

Add the following to Article 783.02 of the Standard Specifications.

“(c) Water Blaster with Vacuum Recovery 1101.12”

Revise Article 1101.12 of the Standard Specifications to read.

“1101.12 Water Blaster with Vacuum Recovery. The water blaster shall remove the stripe from the pavement using a high pressurized water spray with a vacuum recovery system to provide a clean, almost dry surface, without the use of a secondary cleanup process. The removal shall be to the satisfaction of the Engineer. The equipment shall contain a storage system that allows for the storage of the wastewater while retaining the debris. The operator shall be in immediate control of the blast head.”

80163

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within * working days.

80071

* The completion date for this contract is November 19, 2007. An additional 5 working days will be allowed beyond the November 19, 2007 completion date to allow for punch list items.

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

	Page
I. General	1
II. Nondiscrimination	1
III. Nonsegregated Facilities	3
IV. Payment of Predetermined Minimum Wage.....	3
V. Statements and Payrolls	6
VI. Record of Materials, Supplies, and Labor.....	7
VIII. Safety: Accident Prevention	7
IX. False Statements Concerning Highway Projects.....	7
X. Implementation of Clean Air Act and Federal Water Pollution Control Act	8
XI. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion	8
XII. Certification Regarding Use of Contract Funds for Lobbying	9

ATTACHMENTS

- A. Employment Preference for Appalachian Contracts
(included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4 and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

- a. Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above

agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any

evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to

the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or quailifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the

contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or

disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not

listed on the wage determination unless the Administrator of the

be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits

Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan

or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period).

The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V.

This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for

inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
- b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
- c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

- a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a

whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract.

Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification,

distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

“Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.”

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of

any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms “covered transaction,” “debarred,” “suspended,” “ineligible,” “lower tier covered transaction,” “participant,” “person,” “primary covered transaction,” “principal,” “proposal,” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled

"Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision

NOTICE

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <http://www.dot.il.gov/desenv/delett.html>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <http://www.dot.il.gov/desenv/subsc.html>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.